Internet News
● Reviewing the RISC OS browsers
● Getting to grips with newsgroups

Education Extra
● Full details of what's coming up at BETT
● What Citrix has done for Netherhall





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Christmas 2000

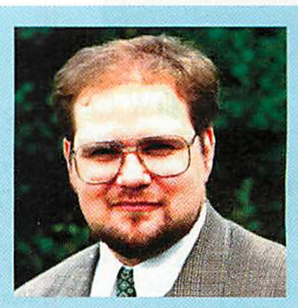
ACORN USER



Features

Regulars

January issue on sale 21st December 2000



I received an e-mail from Rob Ward in Australia about people who complain. Here's some of what Rob had to say after reading the Acorn newsgroups:

"It is just painful to see the good old Pom's gutting themselves over yet another ideal technology. When the Australians coined the term 'whinging poms' in my youthful days (I am now fifty) I though they were too hard on them, but having observed the machaevellian "support" you get from those people I can understand where it came from.

"I have been reading Simon Singh's book 'The Code Book' (4th Estate, 2000, p64) and from there comes a quote from none other than Charles Babbage himself that I thought you'd like:

"'Propose to an Englishman any principle, or any instrument, however admirable, and you will observe that the whole effort of the British mind is directed to find a difficulty, a defect, or an impossibility in it. If you speak to him of a machine for peeling a potato, he will pronounce it impossible: if you peel a potatoe with it before his eyes, he will declare it useless because it does not slice a pineapple.'"

Which just about sums up the doom-sayers on the Acorn newsgroups. Obviously this has been a long running problem — something in the national psyche that just cannot allow something to be successful.

We have in our possession a very competent operating system with a very efficient user interface running on very economical hardware.

But these people see the world through doom-tinted glasses and will not see good news when it's displayed in neon right in front of them — and even if they did, they'd just attack all the more.

Rather sad really.

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Acorn

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requires RISCOS 3.6 /3.7 * requires RISCOS 4 or Partitioning s/w for only £25.00 + vat

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			8x	£30.00	£35.25

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Odyssey Net RO4.0	£449.00	(£527.58)	(£17.24)
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Above prices do not include monitors please see separate price list

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Orb 2.2 GB Parrallel	£199.00	£233.83
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IDE drives require s/w drivers or hardware support i.e. RiscStation or Simtec hardware,

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£99.00 (£116.33)
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1-4MB	£35 *	-------	£75	-------	£35	£45	---------	---------	---------
4-8MB	£55	£55	£55	£45	£55	---------	---------	---------	£55 *#
RISCOS Carrier	£19 *	£19 *	---------	-------	---------	---------	---------	---------	---------
RISCOS 3.1	£25	£25	£25	£25	£25	---------	---------	---------	£25
MEMC1a	£20	£20	---------	-------	---------	---------	---------	---------	---------
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* Re-work if required £25 (£29.38) # not applicable to 33MHz A5000

RISCOS MEMORY prices are a pain please check for latest prices

EDO memory Suitable for RPC, RiscStation & Mico

Also A7000	Ex VAT	Inc VAT
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A3020 10baseT Access+/etx. MAU	£94.00	£110.45
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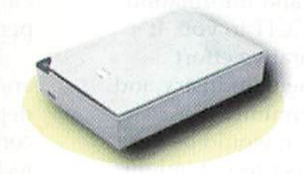
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CD-ROM Lens cleaner	£4.25	£4.99
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24 cap CD-ROM wallet	£5.10	£5.99
20 cap CD-ROM wallet	£3.39	£3.98
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One button now worth £4 million

The UK government says it will give four million pounds to anyone who can make computers easier to use. No problem. I'll take a cheque. In return for pointing out the little middle button on my mouse.

Many of us have to use those mickysoft-fuelled thingies at work, and we all know how easy they are to drive. (One more condescending remark and it's curtains for that smug little paper clip). Others, especially in the graphic and video business are luckier — they have Macs to play around with. Much better, but they're still hard to navigate. You can look at the manual — if you've got plenty of time to spare. The user manuals (not manual) for Avid come in a box nearly a foot square!

Admittedly not many eight year-olds have to come to terms with editing non-linear video, but it's just a matter of scale. I reckon that, beyond the installation instructions*, most RISC OS users rarely have to bother with the manual.

And all because of that little middle button. I know, when I'm searching through the Avid's menus for the 'match frame' icon or the wonderfully named 'decompose' utility, that if I was using RISC OS I'd just click on 'menu' and the choice would be there.

So, three buttons, and RISC OS is British. Four million well spent ... best make out the cheque for cash, if you don't mind.

Actually, it's not that simple. It's not four million cash. You've got to apply for a grant to a group called — wait for it — People At the Centre of Communications and Information Technologies. PACCIT to you. It's billed as a collaborative effort between government, industry and the academic community.

Well four million would be very nice as a Christmas present; might even be able to afford two pairs of brown socks this year. But four million ...

In the year ending June 1999, Microsoft made an operating profit. Profit, mind you, not turnover of . . . are you ready for this? . . . six billion pounds. Six billion! One (admittedly large) company. And the British government is offering four million. Or, to put it into proportion, under 6 pence per head of population.

Lord Sainsbury, when he announced the scheme, said, "We depend more and more on computers and communications technology in every aspect of our everyday lives". Quite so. Very important stuff. So important it's worth nearly a small fraction of the cost of a Sunday paper.

But, as the little old lady said, every little counts. Apply today to avoid disappointment.

www.esrc.ac.uk/paccitlink.htm

Crash bang wallop

I don't know if it's coincidence, divine intervention or a cunning international ploy by ExpLAN to disrupt the weather, but a few evenings ago there was a thunderstorm. Two people I know had their modems fried and another needed a new telephone. Some of the wires from the distribution box had to be replaced.

I was using my computer at the time. The modem was switched on but I wasn't connected to the Net. No damage at all.

Now a few months ago I was doing some complex multi-track sound mixing. Every now and again there would be a click on one of the tracks. I'd play that part again; no click.

Much scratching of head and looking puzzled. But by trial and error I tracked the problem down to the washing machine. As I'm a devout coward I went shopping for a surge protector.

Connected it up, switched on the computer, speakers at full whack and called for a load of shirts to commence whirling. Blissful silence. Not a bang, a crackle or a pop.

I may just have been lucky on the night of the storm. Plenty of other people were at home. I don't know how many were using their computers or calling a friend — presumably one or two. But I reckon the twenty quid or so I paid for the little box was money very well spent.

By the way, I don't have any connection with ExpLAN. The gadget I got has a different name on it. But I'm very glad it's there.

www.explan.co.uk/antisurge/



RISC OS to help solve the mystery of HPS

The recent outbreak of HPS or Horizontal Penguin Syndrome has scientists completely puzzled. Some are convinced it's a devious plot by Bill Gates to defeat Linux; others that it's caused by dumping of excess cannabis production in Antarctic waters. But most are just plain puzzled.

All sorts of temporary solutions have been proposed; miniature crash helmets, velcro glued to their flippers, even going cold turkey on the grass.

But that's just curing the symptoms, not the problem, most zoologists say. The team charged with solving the flopping has decided on a comprehensive series of experiments to determine the cause of it all. They've decided to film the birds in 70mm Panavision using very fine grain film. Then they'll use computer analysis on a frame-by-frame basis.

They'll look, initially at the birds eye movement patterns. They hope to determine from things like pupil dilation whether the birds movements are based on fright, admiration, lust or envy. Well they know the penguins have a built-in genetic inclination to fly.

A whole host of other factors must be taken into account, they say. For instance, does the sex of the penguin versus the sex of the pilot have any bearing on the matter? Does the shape of the helicopter play a significant part? Are all choppers as tilt-worthy? Is a red Sikorsky at two hundred feet equivalent to a blue Robinson R44 at a hundred and fifty feet? Does a Bell 216 with protruding supplementary fuel tanks cause significantly more keeling over than, say, a 214 with only internal tanks? Is the colour significant — if it is, what colours cause the greatest and the least degree of floppiness?

The combinations and permutations are enormous. Windoze machines have proved to be just not up to the job. RISC OS has been proposed as a more efficient platform, and trials are expected to begin any day.

This is not the first time our favourite platform has come to the rescue in this way. Last year there was a not dissimilar problem with goats. They didn't fall over — they jumped. But not all goats; the problem was limited to the Northern hemisphere, and only to goats near the Arctic circle. When they heard the snort of a white reindeer they took to leaping vertically in the air like a load of shaggy Nureyevs.

A team of scientists was assembled under the leadership of world-famous zoologist Gerald Mindelbaum. In the traditional manner, they first decided to find a name for the problem. Some wanted to call it High Altitude Goat Syndrome, but HAGS wasn't popular.

They then spent a long time observing the goats — Finnish Landrace or Suomenvuohi, to be precise. Then they announced that the animals were responding to sudden auditory stimulus. Which was not much of a surprise to the goat owners.

They recorded every kind of reindeer call imaginable (and there are quite a few — fourteen basic sounds for a start). The sounds were then digitally analysed with reference to transients, basic frequencies, harmonics and duration.

These calls had to be cross-referenced to distance to the reindeer, kind of terrain, other sounds present, age, sex and observable state of health of each reindeer.

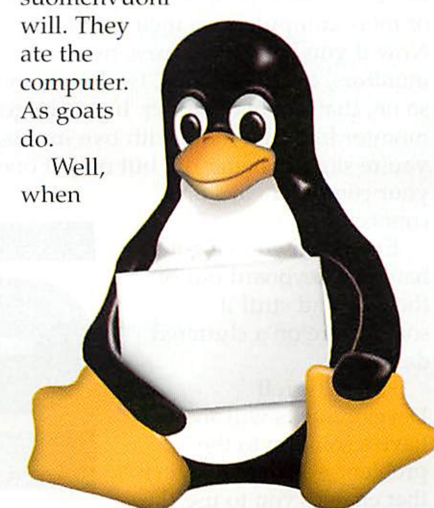
To eliminate stray effects like olfactory input, each call was played via a tape and loudspeakers to a group of goats and the results observed. Height of jump, if any; whether the animals took off front legs first, back first or all four together. Eye and ear movement were studied and tabulated.

Then they used computers to analyse the data. The computer just locked up. They got another one. That couldn't cope either. So — they had all those results and ... nothing. No correlation between the noises, the reindeer, the goats, the length of the antlers, nothing. The scientists were distraught.

They took themselves off for a good dose of vodka and a good think. And in Finland a good deal of vodka is a hell of a lot of vodka. It was nearly two days before they limped back to the project.

To find that someone. Nobody, to this day, knows who. Somebody hadn't locked the lab. Or rather, they had, but they'd not locked the goat pen. Three ladies in a lavatory from Monday to Saturday may not do much damage, but eight hungry suomenvuohi will. They ate the computer. As goats do.

Well, when





Mindelbaum and his team ventured blearily into the lab they didn't know what to do. The first thing was to get the place cleaned up. What goes in comes out again. In a very different form — ask Jasper Carrott for details.

But after the lab was habitable once again, there was still the problem to solve. They needed a computer. And a computer that wouldn't just sit there — one that solved problems.

They were sitting round, groaning and looking generally glum when the tea lady came in with another round of black coffees. She asked them what the matter was. They explained.

"Oh, my boy's got a computer," she said. "I'll bring it in for you this afternoon."

She was as good as her word, and the scientists gathered round. They'd never seen a Risc PC before. They switched it on. They liked the lightning way it fired up. They liked its cheery screen. They liked the way it was so easy to use. They liked it.

But could it solve their problem? They fed in their data. Four months worth of it. Four months worth that had caused the other machine to faint. They told the Risc PC to sift it and look for any meaningful cross-reference. And in just six minutes they had the answer:

The reindeer were making a strange sound — a sort of hissing squeak well above the limit of human ears. But not above that of goats. Or a RISC OS computer. Normally, the reindeer snort didn't extend that high, but there had recently been an outbreak of reindeer laryngitis and the ultra high squeak was a by-product of the disease. The frequency corresponded with a resonant chamber of just the right dimensions in the ear of the goats. Gave them a shock and made them jump. Isn't science wonderful?

A short course of antibiotics solved the problem in just a few more weeks. No more curdled milk for breakfast. Though some people say the cheeses that resulted from goats affected by VACP were sublime.

The scientists were very happy. It was late December and they wanted to be home for Christmas. And the Finns were equally pleased. The scientists became almost national heroes. The Lapland Times published an article on 25th December celebrating the team, and especially their leader. The headline ran; 'Goat Rescue — Gerry Mindelbaum'.

Now the same team is being assembled for the trip to the Antarctic. Under the leadership of Dr Mindelbaum again. It's reported that the first thing he said to them was: 'Right. This time, I don't want any mucking about with those rubbishy windoze machines. Let's get the right computers in at the start.' Then he produced his yellowing copy of the Finnish Times, waved it and broke into song:

'Get RISC OS Ready Gentlemen.
Let there be No Delay.'

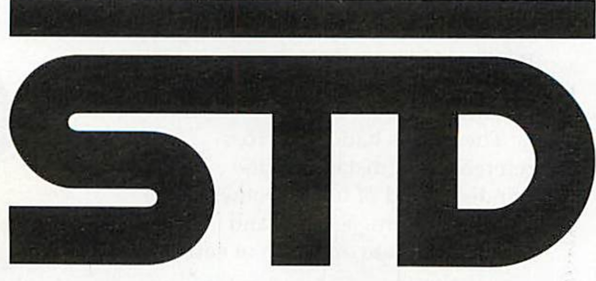
And if you believe all that... just remember the wise words of Chico Marx: "You can't fool me, there ain't no sanity clause."

Stuart switches over

More and more people seem to have two or more computers on their desktops. Now if you have two boxes, two monitors, two keyboards, two mice, and so on, that's a lot of clutter. If you've got a monitor like an Iiyama with two inputs, you're slightly better off, but only if one of your computers has BNC connectors.

Even then you've got to haul one keyboard out of the way and stuff it somewhere on a cluttered desk.

Stuart Tyrrell Developments will soon have a solution to the problem — a digital switch that enables you to use the same peripherals with more than one computer. It's not cheap — around the hundred pound mark. But that's complete with all the cables you'll need. And if you want a PS2 Mouse as well, the combined price is only £125. Both prices include VAT, by the way.



In brief

DOTTY COM

Just a year ago it would have cost you seventy US dollars to register a dot com company. I don't know what's happened, but prices have suddenly dropped to reasonable levels.

Not quite as reasonable as free, though. Unless you create RISC OS software in which case Michael Stubbs is offering www.YOURNAME.riscos.org.uk hosting for (wait for it) free. You keep your original site and the new one acts as a signpost with automatic redirection.

So far quite a few software writers have signed up. And, if you don't want to bother with writing your own page, Michael will no doubt offer to knock one up for you. Sorry, will no doubt offer to create a visual and informational wonder to delight all visitors to your site: www.arenaman.com or www.riscos.org.uk

Wakefield 2001

Wakefield Acorn Computer Group are pleased to announce that they will be running the 6th Acorn Wakefield RISC OS Show on Saturday and Sunday 19/20th May 2001.

Once again the show will be held at the Thornes Park Athletics Stadium, Horbury Road, Wakefield, West Yorkshire.

All the popular features of our previous shows will be repeated, including a show theatre with a full programme on both days. At this stage there are 14 preliminary bookings from exhibitors. For latest information see the show Web site at www.wacg.org.uk/show/

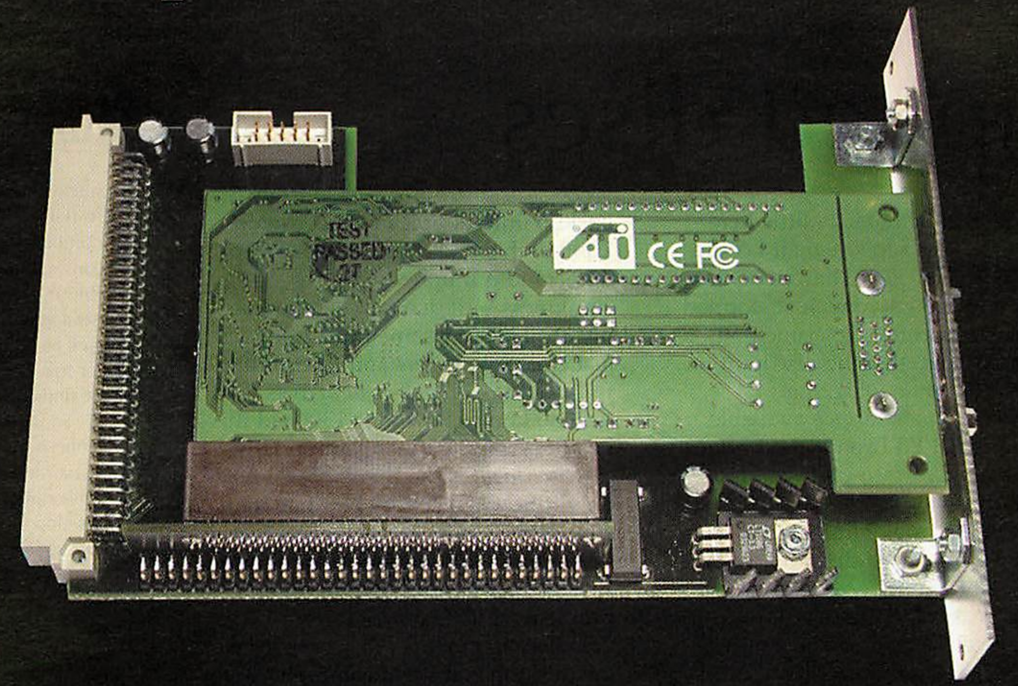
You can address any enquiries to showinfo@wacg.org.uk or showpub@wacg.org.uk, or by snail mail to: WACG Show, 95 Cumbrian Way, Lupset Park, Wakefield, WF2 8JT

ANT is dead...

...long live ANT. Argo has announced that it is no longer to support the ANT Internet Suite, after ANT announced they wouldn't be either. Enter the cavalry: Paul Vigay to the rescue.

Paul must be one of the most prolific writers of RISC OS

A Risc PC displaying 1920x1440x32K or perhaps 1600x1200x16M colours ?



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Email : kortink@inter.nl.net. In the U.K. also available from C.J.E. Micro's (www.cje.co.uk).

Slipped discs

Right. Smug smile falters a little here. A couple of years ago when all I could afford was an A5000 the hard disc died one dark and gloomy day. Just stopped working. No warning, no crunching noise, no nothing. Just the disc light on permanently but no whizzing.

There's no repair service available where I live, but I'd been a good bunny and had a nearly up-to-date set of backup floppies.

Down to the local windoze box shifter, got a new hard disc and, with the fearless bravado born of ignorance, managed to get it formatted and spinning nicely. Phew. Breath again. Unbacked-up (if there's such a word), and all was well.

Now I've got a shiny StrongARM device with two, much bigger, hard discs. One (the one I put in) makes a bit of a whine, but it's not that bad and I can tell it to go to sleep using Andrew Berry's *SpinDown* program.

But backing up three gigs worth of stuff onto floppies just isn't on. So I cunningly back up drive four onto drive five and drive five onto drive four. No way they can both die at the same time. Surely.

So when the ARM club announced *DiscKnight*, I just thought, 'Well that'd be a good thing to have. One day. No hurry. I've got two perfectly healthy drives. No problem.'

But a few days later I got round to ordering *DiscKnight*. And I found there was a free downloadable demo version. It can't fix things, but can check discs over and let you know if you have to tread carefully. Great. Tried it with the main drive. *DiscKnight* buzzed away for a few minutes then announced, 'File ?.File000187E8 found. Disc is bad, run with -f (and -u) to fix.' Shock horror!

Never mind, I thought — there's always the backup drive. *DiscKnight* had a go at that too; 'Headless fragment ID &0000BE89 found in zone 1 offset &0D9D. Disc is bad.'

Oh woe is me. A full backup onto floppies would use up 2,140 of them! Or I could use 32 Zip discs (and put up with the zip crankiness — it doesn't seem to like my SCSI card or something). Or I can just cross my fingers and wait until the full version of *DiscKnight* arrives. Well — who knows how long I've had this headless fragment lying around?

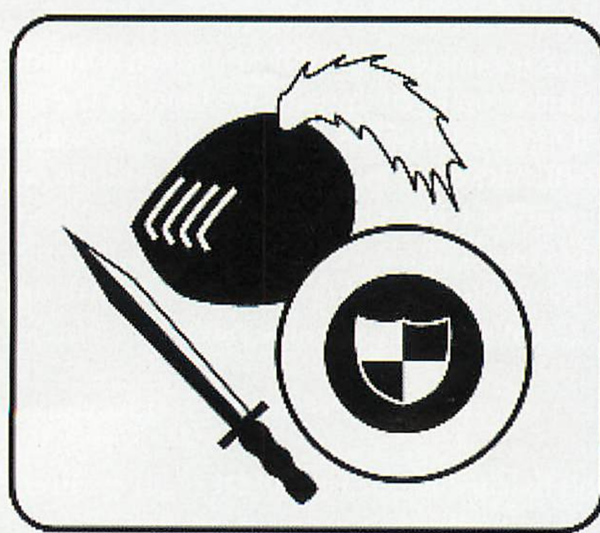
DiscKnight is the first (and, so far) only RISC OS recovery package that supports the new long filename/small LFAU format. It works with any filing system, and has fixes for 64 different problems (I hope one of those 64 is 'headless fragments'). It works from the desktop and has a comprehensive undo facility.

Best of all, if you really get stuck, you can tell *DiscKnight* to determine complete details of the problem. Then you can print out the details and consult the authors by telephone or e-mail. And this online consultation is free to registered users.

DiscKnight was launched at the RISC OS 2000 show, and was completely sold out by lunchtime the first day! So far there have been plenty of successful repairs. And none that the package has failed to cure. So I'm waiting for my copy with fingers firmly crossed.

DiscKnight costs £10 (£9 to ARM club members) including UK post and packing.

www.armclub.org.uk/products/discknight/



In brief

software: he has developed AntUtils, FresUtils, and a huge number of other programmes; games, utilities for connecting Psions, educational things, a font cataloguer, plus loads more as well as writing the PC column for this esteemed. I wonder how he finds time to earn a living.

So far the idea is still in embryo form, but he is visualising perhaps an annual subscription to enable him to develop the package and provide support for users. He's asking, in the first instance, for people to e-mail him so he can gauge interest levels.

www.vigay.com

Wristwatch phones

Using the AMULET chip — the asynchronous ARM processor developed at Manchester University by Steve (ex-Acorn) Furber — prophets are predicting mobile phones the size of wrist-watches.

Unlike normal processors the AMULET doesn't have a clock that keeps the whole machine ticking whether it's doing anything useful or not. Instead each sub-system flashes into action only when it's needed and only long enough to do its thing before shutting down.

The end result is vastly reduced power consumption, much cooler running and, more importantly, no radio interference.

Steve Furber said: "Computer chips work a bit like an orchestra. You have the conductor in the middle beating his baton, telling each part when they can communicate with the other parts. The problem is you get a wave that interferes with the electronics in the rest of the device. That means manufacturers have to put shielding around chips that raises costs and stops you slimming down devices.

"But the AMULET is like the lighting at home. If you want to read, you put on a lamp. You don't need to have all the lights in the house burning power."

Contacting AU

news@acornuser.com
Ian Oliver

Better horses

Ben and Julian Levens give to you straight

Before we vent more of our opinions upon you all, we'd like to give you a bit more information on the background of Levens Software. We have been trading now since 1995, and remained in the background of the RISC OS scene working on bespoke software until 1998, when we launched our flagship product *HTMLPro*. Our computers have gone from BBC B to Master Compact to A310 to Risc PC. We now operate with three RISC OS 4 SA Risc PC's and an A7000+.

We decided about a year ago that we needed to add hardware to our catalogue, and for about four months we pondered if this was a good idea. It was imperative that we covered our outgoing costs, for example full page advertising in *Acorn User*. As a new advertiser we expected sales in the first few months to be a little slow. As our name became more established, sales picked up and we are now shifting quite a few boxes each month.

With the advent of the RISC OS 2000 show, two more computers are floating around the market place. The previously unheard of Omega from MicroDigital and the much awaited RiscStation Portable. Now, we don't think we need to say much about the portable — except hurry up! — but what of MicroDigital's new offering?

MicroDigital have been heavily slated on the newsgroups, and in the Press, regarding their first Mico, at first sight just an enhanced A7000+, but like ourselves, MicroDigital are a company that have been there, in the background busily working away and taking risks. We think that they have been doing the right thing by keeping the project under wraps.

In our enthusiastic market, one premature word on a product and along come 1000 or so newsgroup articles. These articles either complaining that the proposal falls short and is too costly or hypes up the product to the extent that potential customers feel let down when the company merely delivers on what is essentially its original spec.

What marvellous news that MicroDigital are releasing a computer based on the 287Mhz version of our favourite processor, with 64Mb of super-fast PC memory. But, what is this we see, the possibility of a 600MHz to 1GHz XScale™ processor? Crikey!

Finally, we have a company so committed to the market that they are willing to take a risk and create a computer ready for the next generation of RISC OS. A full 32-bit RISC OS computer, with hardware MPEG decoding and various other bits and bobs can only be a good thing.

Now, for the public, to be able to use the new Intel XScale range of processors in an easy to use RISC OS environment, we need to have a 32-bit operating system, and we need the confidence to risk spending the money on software development. The possibility of a computer that is on par with current PC processor speeds bodes well for sales, and for the market as a whole. But there is still something missing, that extra ingredient that sets off even the finest computer.

Ah, yes! Customers, a user base — preferably growing. The one thing that has been a problem with the RISC OS market over the last year is not, per se, that some people are 'jumping ship' but that they are slagged off for doing so. If I am not happy with my current car, I buy one that I will be happy with. I don't hang around aimlessly driving an ugly uneconomical car. I find a nice practical car that gets good mileage and pulls the ladies.

So why, when it comes to our computers and operating system, do we slate people who change? Instead, the RISC OS community needs to understand why these people moved platform and develop even better products and win them back. We at Levens use RISC OS because it does most of what we want in a way that we find productive — we would expect any sensible person to do the same with any computer.

We have a sister company developing Web sites (**www.realingenuity.com**) and for this we use PCs. As RISC OS-philes, we find this a little galling, but we are running a business and recognise that the software under RISC OS is lacking in this area. As Levens Software we have discussed a project to remedy this, only it's not made it to the top of the project list yet.

Conversely, in praise of RISC OS, one of our PCs was out of action for an afternoon to de-frag its hard disc as its performance had dropped off somewhat. Out of curiosity we decided to de-frag (*COMPACT) one our RISC OS hard discs: 15 seconds. The serious point about this is that the PC was out of action, along with its Web designer and hence lost income.

However, under RISC OS de-fragging a hard disc is a non-issue and as someone in business I don't care how this achieved technically. Just one example where RISC OS allows the user to concentrate on the task at hand and not on PC support tasks.

We shouldn't bitch about customers choosing an alternative, we all need to stand back and take an objective view of RISC OS. If we all pull together, and create the software that we need to solve the problems that we have, and buy the solutions created for us, then the market, with creative marketing to reach old and new customers, will flourish and RISC OS will survive and prosper.

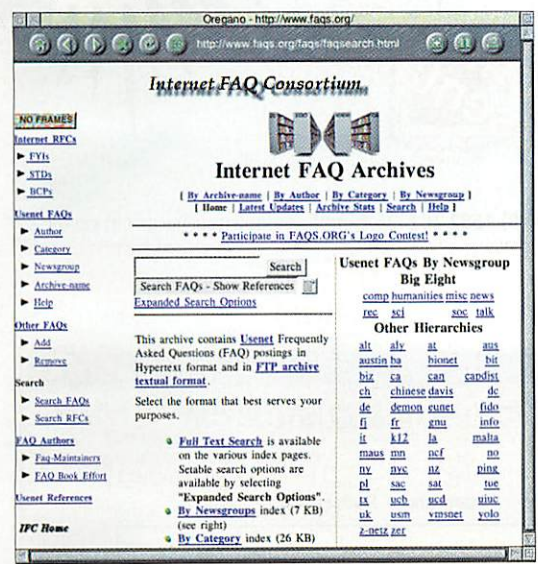
END



Getting the FAQs

"Where is the FAQ?" is a frequently asked question. And that is, of course, what the TLA (three-letter acronym) FAQ stands for. It's a list of authoritative answers to questions that keep coming up, not just in newsgroups but in a discussion forum of any medium. The FAQ is designed to gather information, reduce repetition and keep the forum fresh.

If we're talking about a Usenet newsgroup FAQ, the answer is that it can probably be found in "news.answers" which is one of several special newsgroups which, to quote the news.answers verbose introduction, "serves as a repository for periodic informational postings from other Usenet newsgroups". It's a moderated newsgroup to which authors can post FAQ documents which should adhere to the group's posting format and guidelines.



Get your facts straight here

Before we fall into a recursive loop of FAQs about FAQs — yes, there is such a FAQ — there are Web sites where you can read Usenet FAQs without having to join news.answers and download them. One such is **www.deja.com/ group/news.answers** and while I was looking for FAQ repositories, I came across the Web site of the Internet FAQ Consortium archive at **www.faqs.org**

This site contains over 3300 FAQ files from 1700 newsgroups, written by over 1250 authors, including four Acorn newsgroup FAQs, and the HTML versions are generated daily. As it happens the site's copy of the comp.sys.acorn. networking FAQ, now maintained by Ian Jeffray, was well out of date but should be updated shortly. You can find an up-to-date copy at **www.jeffray.freeuk.com/ csan-faq.html**, or in a monthly posting to the newsgroup itself.

What's in a name?

Signing up for an Internet account online with some ISPs can still be tricky for *Acorn* and RISC OS users because the necessary Domain Name Server (DNS) details are not always published, and often technical support advisors will only deal with *Windows* or *Mac OS*.

Domain name servers tell your system the numerical address of a Web site so that it can be accessed directly. Most details you need for manual Internet configuration are in a *Windows* ".ins" file, however DNS addresses are not always included because *Windows* can find these out each time you dial in, while RISC OS cannot.

ISPs' technical support instruction pages for *Mac OS* setup will often reveal the DNS addresses, or Stewart Brodie's venerable *autoDNS* program can be used to find usable Domain Name Servers for almost any ISP's host domain. While online, download *autoDNS*, unpack and place in an empty directory. Let's find the *Plusnet.co.uk* DNS addresses.

Create an Obey file containing one line of text: Dir <Obey$Dir> and save it as !Here in the same directory. Double-click on !Here, open a Task window from the Task Manager icon, and type:

```
autodns plusnet.co.uk
```

and press Return. Then *autodns* responds with:

```
I found 2 authority nameservers (in no
particular order):
   195.166.128.16     (ns1.force9.net)
   195.166.128.17     (ns2.force9.net)
```

autoDNS doesn't guarantee to always find the right DNS servers, but you will get online with what it finds.

http://ftp.barnet.ac.uk/pub/Acorn/internet/ freenet/s.brodie/autodns_0.01.arc

In brief

Ask a Bobby

Web design pros know there's no such thing as a WYSIWYG HTML editor and the way to check pages is by validation.

Apart from the World Wide Web Consortium's online validator at **http://validator.w3.org/** you can try the accessibility-conscious *Bobby* validator at **www.cast.org/bobby/** which will report any accessibility and browser compatibility errors, and passes are entitled to use the *Bobby Approved* icon.

Look it up

Two related Web sites by Los Angeles company *Lexico* can help you find, spell or choose just the right word: **dictionary.com** has the meaning and spelling of over 600,000 words, noting UK English spelling variations.

thesaurus.com is a version of *Roget's Thesaurus of English Words and Phrases,* allowing you to choose a word that is similar; looks like, resembles, bears resemblance to; rhymes with; takes after; or imitates the one you started with.

http://www.dictionary.com
http://www.thesaurus.com

Name that colour

US magazine *PEI* has a Javascript fun function on its Web site that shows the colours produced by using their names in HTML code rather than hex codes. It works fine with *Fresco, Oregano* and *Netscape,* but not with IE5. There's also a RGB Triplet Colour chart showing hex values of one of the 256 colour sets, but the colours are a bit small. I prefer the bigger non-dithering colour swatches shown at **www.lynda.com/hexh.html** and **www.lynda.com/hexv.html**

Even *Lynda* admits that using the "browser safe" palette isn't always as good as a 256-colour adaptive palette.

www.peimag.com/Calculators/ calculators.htm

Contacting me

David Dade:
comms@acornuser.com





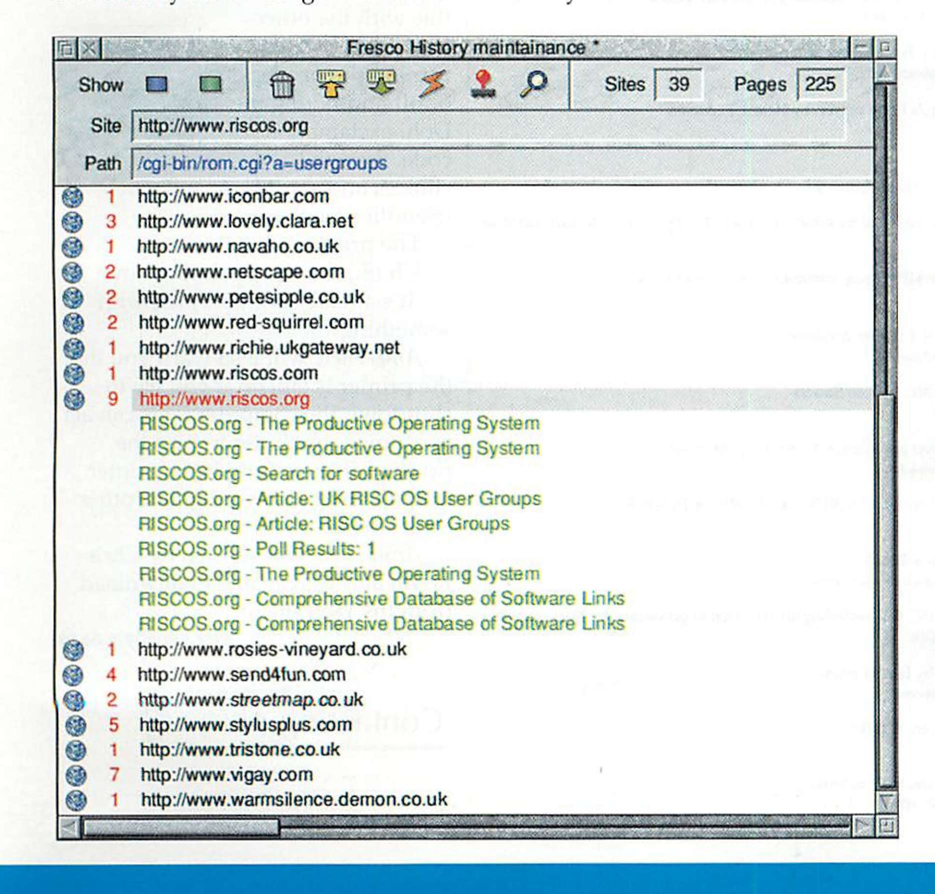
The history program

This small utility application by 'Lenny' makes an ideal complement to *Fresco*-owning internet users; either the standalone ANT version, or as a Vix module for Argonet customers using *Voyager*.

As it's name implies it's a history file editor, which makes up for Fresco's rather limited support in this department. Fresco maintains a list of up to the last 250 URLs visited but not only are you presented with just a plain listing of the page title or web address but occasionally *Fresco* can get it's URLs in a twist and you are left with an entry that doesn't do anything when you select it.

Historian not only presents a nice, organised list of URLs visited but also warns of any corruption in the file, removing duff addresses as it goes. This will ensure that even if you don't use any of the additional, management, features of *Historian*, it makes a convenient way of ensuring the validity of the history file.

Historian will sort the various Web addresses into site order, which is very useful and clarifies the display immensely. The number of sub-entries is shown and, by double-clicking, on the site label, *Historian* will expand it's display to show you any sub links within a site. Individual entries can be deleted, or you can drag a selection to bulk remove a section of URLs.



As you can see from the accompanying diagram, *Historian* is fully RISC OS style-guide friendly and features a handy toolbar so you don't need to navigate loads of menus to find the most commonly used feaures; such toggling between URLs and site titles in the display, deleting entries, saving and loading, purging the whole file (with suitable warning first), re-date stamping or searching.

The latter option to search the file is very handy as it means you can quickly locate that site that you know you've visited recently but you now can't find.

Additional options and preferences can be set from the main menu and, like most RISC OS applications, there is quite enough flexibility to keep most users happy. Saveable preferences include the option of whether or not to install an icon on the iconbar when running, to launch URLs via the ANT protocol or the Acorn one and whether or not *Historian* will automatically launch itself from from within Voyager *Fresco*.

You can even export the whole list or a selected portion, either as an HTML page or as plain text.

Historian is free, so whiz over to **www.argonet.co.uk/users/lenny/soft/index.html** and download a copy now.

Is anybody out there?

Here is another of those mini utilities that I didn't know existed — until I spotted a recent message on one of the internet newsgroups. Intrigued, I downloaded a copy only to find what's a very handy and probably unknown utility. It's purpose is very simple — to tell you the state of a printer plugged into the parallel port. I was slightly apprehensive at first because I have my printer daisy-chained off the back of a parallel port ZIP drive — but I was pleased to find that *Any1There* works fine with this setup, so other users shouldn't have a problem.



Because different printers can provide different feedback to the computer, the first thing you will probably need to do is to set it up for your particular computer kit. This is easy enough because *Any1There* automatically opens it's choices window the first time you run it. A small cartoon-style icon will do it's best Homer Simpson impression and inform you of the relevant code the printer is currently providing.

You can now click on the relevant On, Off or Busy icon in the Choices window in order to assign this code to one of the known states. Repeat this with the other two printer states by turning the printer on or off and noting the Doh! exclamation code. Save the choices and *Any1There* will give friendlier feedback:



The printer is on!

Uh oh, don't try printing now

It's already pre-occupied with something!

Any1There will also warn you that the printer is still on if you try to shutdown the computer. This can act as a timely reminder to turn the printer off, especially if the printer doesn't have a power light or other indicator on it.

Any1There was written by Chris Flynn and is available to download from his Web site at:

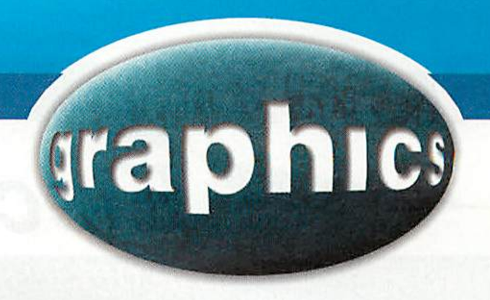
www.chrisflynn.co.uk

Top Twenty Links:
Courtesy of www.riscos.org

No.	Visits	Description
1	123	Acorn Arcade - The best 'first stop' for Acorn Games & Demos Homepage: http://www.acornarcade.com/
2	120	RealAudio - A rough and ready RISC OS port of RealAudio Homepage: http://www.neutralino.demon.co.uk/software.html
3	110	StrongED updated - An updated version of StrongEd, by John Whitington Homepage: http://www.tnpsoft.co.uk/stronged/
4	108	Zap - Arguably the best RISC OS text editor (well, it's my favourite!), by Mixed Homepage: http://www.zap.uk.eu.org/
5	104	DigitalCD - A desktop music player for RISC OS, by André Timmermans Homepage: http://www.geocities.com/SiliconValley/Horizon/4471/dev.htm
6	102	ArcWeb - The best freebie web browser for Acorn machines., by Stewart Brodie Homepage: http://louis.ecs.soton.ac.uk/~snb94r/arcweb/arcweb.html
7	93	MPEG2 - Play MPEG/MPEG2 movies, by Peter Teichmann Homepage: http://rcswww.urz.tu-dresden.de/~teich-p/asoft.html
8	92	Flash - A slightly improved version of Leo's Flash player, by Henrik Pederson. Homepage: http://login.dknet.dk/~henrik/
9	84	Alerion - Flying shoot-em-up game Homepage: http://www.adamseeley.freeserve.co.uk/acornsitepd/games.htm
10	84	MDFs - Carlos Michael Santillan's extensive list of monitor definition files, by Carlos Michael Santillan Homepage: http://www.arcsite.de/hp/cms/emdf.html
11	84	Riscster - A client for Napster, the online MP3 music community, by Rob Dimond Homepage: http://www.riscster.cwc.net
12	83	The Acorn Emulation Page - Loads of different emulators. Homepage: http://www.cybervillage.co.uk/acorn/emulation/
13	74	PDF - for displaying Adobe PDF documents., by Leo Smiers Homepage: http://people.a2000.nl/lsmiers/index.html
14	73	Isis - A comprehensive freeware spreadsheet application, by Nicholas Marriott Homepage: http://www.alphapro.demon.co.uk/Acorn/isis.html
15	70	MPEG-Works - An MPEG decoder and encoder for RISC OS, by Henrik Pederson. Homepage: http://login.dknet.dk/~henrik/
16	67	Socketeer - An internet dialler, by Matthew Bloch Homepage: http://www.soup-kitchen.demon.co.uk/software/socketeer.html
17	65	Acornet - A freeware internet suite for RISC OS, including all you need to get online, by Various authors Homepage: ftp://freenet.barnet.ac.uk/pub/Acorn/acornet/
18	61	iBeat - A port of the Swatch iBeat clock, by Iain Truskett Homepage: http://midnightrealm.org/~koschei/code/riscos/
19	60	MDFEd - Monitor Definition File editor, by WIMPy Homepage: http://www.yeti.dk/tsoft/index.html
20	57	Sheet - A shareware spreadsheet application, by Tim Dilks Homepage: http://www.compsoc.man.ac.uk/~tjd/APPS.HTM

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What you've got

I don't think we appreciate just how lucky we've been over the last 12 years with the 'object-based drawing program' that comes free with every Acorn/RISC OS computer. The fact that *Draw* exists has ensured that many other programs are far better than their PC equivalent.

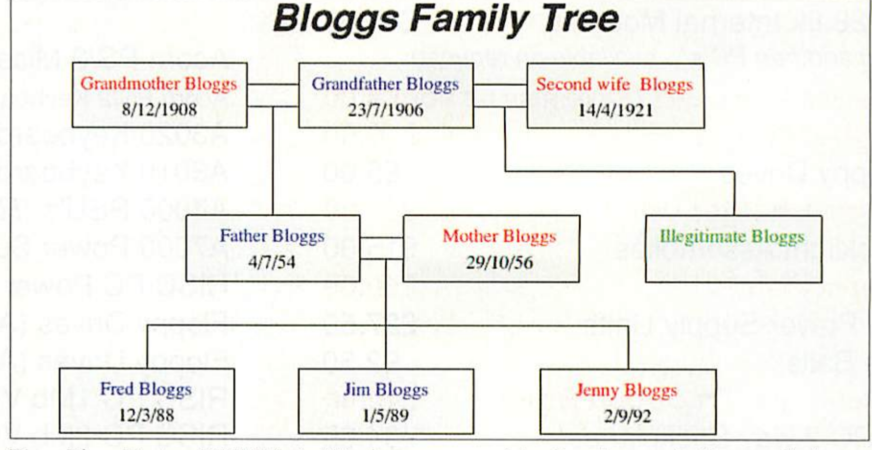
Of course *Draw* would have been better appreciated had it been sold separately as Simon Anthony commented in his series on using it (Christmas 1999 to May 2000). But simply because every RISC OS computer-owner has it makes many other things possible.

To begin with there are the programs that extend *Draw* or object-based drawing in some way: from *DrawWorks New Millennium* and *DrawPlus* to *Vector*, *ArtWorks* and (soon, honest) *Vantage*. *DrawWorks* has developed from a simple button bar for *Draw* itself into a program containing numerous features of its own not to mention the additional programs and fonts that are bundled with *DWNM*. It's even available free in a cut-down version, *DrawWorksSE*.

DrawPlus was an early attempt to extend *Draw* and included libraries and layers, innovations that I wish *Draw* itself had incorporated. The commercial upgrade from *DrawPlus* is *Vector* which is bundled with RO4 upgrades. For those who've got the bundled program it's well worth shelling out for the manual for Vector as a look at the example files will make clear.

The big programs are, of course, *ArtWorks* and *Vantage* which I mentioned these last month. As I'm writing this I'm expecting *Vantage* v0.97 to drop into my *Pluto* box — just one more step to v1.00? Perhaps more important (for making RISC OS a good platform to use) are the programs that simply use the *Draw* format.

I use *TableMate* frequently and although it does most of what I want I occasionally need to add an effect not available in the program itself; for that it's simple to save it as a drawfile straight into *Draw* (or



DrawPlus, *Vector*, *DWNM*, *ArtWorks* or *Vantage*) simply by dropping it onto the of *Draw* icon and so on.

Because *Draw* is part of RISC OS I know that Pinpoint and *Eureka*; *Schema* and *HolyBible*; *Cabriolet* and *EasiWriter* will all (along with many other programs) allow an output in Drawfile format and I can easily amend it. It's the latter that many PC programs lack and that sets *Draw* apart.

It's far easier to add, remove, move, change colour, shape and so on when a graphic can be exported as an object based drawing than its bit-mapped (*Paint*) equivalent.

I presume that every school with RISC OS machines teaches the use of *Draw* (and if not, why not??) as it's accessible to infants and appropriate for use by postgraduates. I do wish though that Acorn had added one or two refinements — my personal wish has always been for arrowheads that didn't extend the line as that would allow *Draw* to be used as a first-step CAD program and greatly enhance its use for preparing Maths and Technology worksheets.

The list of programs that export Drawfiles has just (beginning of October) incremented by one. Alex Waugh has produced a program (*Roots*) that helps you design your family tree and output the result as a drawfile. Alex is releasing the program as shareware and it can be purchased from the Web by credit card (or by cheque in the post). A limited version is available free.

Roots shows signs of promise as it already comes with an excellent manual in HTML format and doesn't seem to crash like many early versions of even the best software. Even a buglet causing a minor stall (not a crash) was corrected within hours of my pointing it out to Alex.

Roots is designed to graphically lay out a family tree and incidentally store a small amount of information about each person — for this task it's already far superior to the expensive but ill-fated *Ancestry II*; like *Ancestor* it can import and export GEDCOM files and although simpler (and more limited) than either *Ancestor* or *Family* it shows promise of being able to take over where *Family* left off and being an excellent companion to *Ancestor* whose graphic output is limited to HTML.

The final good thing about *Roots*? Once you've saved your tree as a Drawfile you can easily and quickly amend it in *Draw*, *DWNM*, *ArtWorks*, *Vantage*, ...

DrawPlus v2.50 & Vector demo **www.keelhaul.demon.co.uk**
DrawWorks SE **www.isvproducts.co.uk/**
Roots **www.ecs.soton.ac.uk/~ajw498/**

Contacting AU

graphics@acornuser.com
John Cartmell







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Under the big top

Brian O'Carroll reveals that there's one thing he would change about the RISC OS 2000 show...

The recent Epsom show was the day that one of the best kept secrets was revealed — the (almost silent) announcement of Omega from Microdigital, a new StrongARM/XScale box that boldly claims that the 'The Future is Inside' for RISC OS desktop computers. By now there should be a good spread of in-depth articles about this surprise machine so I shan't elaborate here.

Indeed, it was not (couldn't have been) this surprise announcement that brought the floods of Acorn users to the RISC OS 2000 show. The attendees must have decided to attend the (slightly busier) Saturday on the strength of other treats. The large numbers attending had an unexpected side effect — the show ran out of printed tickets. RISC OS 2000 can now officially be called a sell-out.

The big prize

One person I spoke to had "come with enough money to buy a new machine", but was denied the chance to acquire a RiscStation laptop. Only a mock unit was in evidence and Christmas-time is the best guess from RiscStation for a production release. Many attendees completed forms registering their intent to buy the portable (and to suggest a name for it) upon its release. Being a British machine I suppose it is essential that we have a queue for it.

The much talked about Viewfinder graphics card was demonstrated by CJE but also not available, it now being on back order because demand has been higher than John Kortink has been able to keep up with. Seeing the effects of the card on a 19in monitor clearly shows that the old rulebook on screen resolution and colour depth limits has been torn up. CJE were also demonstrating (and selling) the Psion Net Book — an inbetweenie-top-sized portable that is more of a big palm than a small lap.

The big shifters

CJE's stand was not all high tech, as Geoff, after manning the stand for two days, pointed out: "CJE showed customary valour and skill in selling things from cardboard boxes", and thus wins the prize (by a whisker) for having the greatest range of



Under the



products on one stand. It's well known that RISC OS 'goes on working for longer' and CJE validate this claim by selling software that works just as well today as it did five years ago.

Moving down the price scale, and further into the domain of equipment that is actually available, the RiscStation Osaris palmtop, with RISC OS link software was selling briskly at CTA's stand. I started to write this report on one that I bought at the show. Although I was a confirmed printed diary addict yesterday, I feel a surge of modernisation coming on after getting to know the Epoc system and its *Agenda* software. This is more so after finding out that an agreement is now being worked upon to enable Chris Morison's *Organiser* software to synchronise with *Agenda* on the Osaris.

If you've missed RISC OS 2000 you've also missed all the discounts, so I shan't detail all the money saving opportunities that you're too late to take advantage of. However, R-Comp's software range was selling notably fast, and, even without show discounts, they have a permanently slimline pricing structure. The new *DialUp* software together with *WebsterXL* and *MessengerPro* makes a complete Internet suite, but you can buy just the bit of it you want, and pay just a bit of the cost accordingly.

The big sell

The R-Comp Interactive stand was a long line of demonstration machines half of which were given over to the 'games' players and the rest had able R-Comp people showing prospective buyers exactly what the software can do for them.

When I asked Andrew Rawnsley about their stand's layout he said: "A lot of people already have one of our products, be it WebsterXL, HTML Studio, or a copy of Messenger Pro, so [they ask] 'I've got this — show me the rest of it'. We always have lots of machines [at the show] because we have lots of products, we have to have lots of machines to demonstrate them on. People like to see stuff in action before they buy."

This is a feature of the R-Comp stand that always particularly impresses me. They do make good use of their time at the show to demonstrate software which comes in small segments working in concert in true RISC OS style. When we look about us for that much hankered after 'killer application' we could do with remembering the success of R-Comp's and similar products — the sum of the parts…

Vantage did not make an appearance, but iSV did with *DrawWorks New Millennium* still stretching the existing un-extended draw format to its limits. The author at iSV, Aaron Timbrell himself, says he is running out of things that can be usefully added to this already highly productive package. I'm sure he'll think of something.

Although some well known outfits were un-represented at the Exhibition (as customer announcements were wont to call The Show) one exhibitor was previously unknown to me. Which is only my fault for not paying proper attention at past shows, as Robin Edwards says that a proper live demonstration is the only way to adequately communicate the capabilities of his FIRST (Fully Interactive Regression STatistics) package for RISC OS computers and he's been attending for years.

"It's the only software of its kind, anywhere." he says. He was too busy showing people the analysis and graphical feedback facilities FIRST provides to say much more to me=. Robin is, however, offering free loan copies for serious enquirers to evaluate (see contacts). I can't describe what the package does without using long lists of mathematical terms, but if you use statistics, to analyse school test results for example, you can be sure this software speaks your language.

The big question

Where is the RISC OS platform going... where does the future begin? The answer is different depending on who you are. To developers like Microdigital it begins in secrecy and Non-Disclosure Agreements. Starting a new product with no public feedback and just the results of your market research and the opinions of



your trusted experts to rely on is risky to say the least, but the only option where big money is involved.

Investment money has to be justified to people who do not care about such vague arguments as the aesthetics and productivity of the RISC OS platform, and this kind of persuasion is hard work. Already some of this hard work has paid off and resulted in the machines now on sale. But it has taken over three years for Microdigital to reach the point where it can announce the Omega as a product... how many others are bubbling under?

The second answer to the question "where does the future of RISC OS begin" is, for the users, that it begins at the user shows. Here is where the disparate RISC OS development companies come face to face with you, the end users, and where you, the end users, get to make choices about where to invest your money. Microdigital themselves did not have a stand and one suspects they are putting in all the testing hours they can in order to bring Omega to market. It's too late for feedback from users at the show even though, I know, you would all love to have seen a mock up.

There is a dividing line between development and marketing. Recent months have seen this division fall later in the process and the shift has left a gap in our perception of what is happening in the workshops of the developers. Things are happening. Omega has proved that secrets can be kept and the people who know the secrets of today will say no more than that. But Omega is real. You can count on it (very quickly).





The big cheese

Paul Middleton at RISCOS Ltd wasn't disclosing anything when he said "I know what people are up to", but he was pleased about it, and his predicted prospects for anyone who has C++/ARM programming ability were rather rosy: "[they're] almost guaranteed a RISC OS development job".

RISC OS 4 development is going ahead as ever and one of those C++/ARM programmers Paul mentioned is due to be taken on for the next stage imminently. The aim of OS development is to support what is required. "If everyone has USB hardware on their boxes by next year RISCOS Ltd will develop support for USB" Paul explained.

The Association of Acorn User Groups (AAUG), the glue that binds the RISC OS user community together, filled their stand with demonstrations from past and present. A BBC Master with a Cambridge Co-Processor — still useful even today. Also in full demo mode was the shipping radar software (as featured in *Acorn User*). This is a RISC PC in a plain rack-mount box and conveys a smug 'why hasn't shipping radar software done that before' message to all who use it.

Also secreted in the AAUG vicinity was Empeg, who brought a dashboard from a Ford Ka with them — all this to demonstrate the music system which is a StrongARM driven box capable of storing from 100 hours of compressed music for playback on the move. Also featured in *Acorn User* (May 2000) as the brain-child of Hugo Fiennes and co.

The AAUG's purpose, though, aside from pretty displays at user shows, is to help RISC OS users get in touch with each other through local user groups. A comprehensive table of user groups around the world is available from them (see www.aaug.net) to this end. RISC OS 2000 was organised by The ARM Club, who, like many user groups, is a member of the AAUG. All those exhibitors were at RISC OS 2000 at your request — an exhibition organised by users for users.

And what would I have changed? I would have worn more comfortable shoes.

END

FIRST Statistical Package, **sales@serious-stats.co.uk**, trial download from **www.serious-stats.co.uk**

Into the Othernet

Neil Spelling starts his look at global bulletin boards

Usenet, which is short for Users Network, is an international network of newsgroups (discussion forums that each feature a specific topic). With an estimated usage of 50 million users, even the most unusual and specific newsgroups never seem to run out of messages. The fact that Usenet is such a large network is what makes it so valuable — because there are so many users, the topics of newsgroups can range from the broad and general to the extremely specific and unusual.

Usenet can be useful in many ways. The most obvious use is as an *information resource*. No matter how unusual a question, there is probably a newsgroup out there with enough people who would be willing and able to give you an answer. Although some of the answers might not be completely accurate, you usually will receive enough replies that you will be able to weed out the incorrect responses.

Before you post a question to a Usenet newsgroup, read that newsgroup's FAQ (Frequently Asked Questions) first — more about FAQs in a moment. If you have never used Usenet before, I'll be providing some useful tips on posting for the first time.

In addition to getting your questions answered, Usenet can also be used as a news source. There are dozens of newsgroups devoted to the discussion of current events in countries around the world. For example, you could also check the **rec.arts.movies** (don't worry — newsgroup names will be explained soon enough) newsgroup to decide which of the newest films you should go see. Beware though, some of the generic groups are US-biased so they may be discussing films which won't be released elsewhere for months.

If you're the type of person who likes to talk about less practical issues than world news events there are thousands of newsgroups devoted to topics like TV shows, rock bands and video games. For people who like to have pen-pals, there are many groups whose sole purpose is for the trading of e-mail addresses.

Until recent years, Usenet has focused primarily on computer-based topics or technical discussions. But, with the sudden increase in Internet usage outside the technical professions, Usenet has softened up quite a bit and now includes hundreds of newsgroups for the discussion topics such as music, paintings, theatre, gardening, sports, TV, and clothing.

Get the FAQs

In an attempt to reduce the number of repeated questions, most Usenet newsgroups maintain a list of Frequently Asked Questions, abbreviated to FAQ. The purpose of a FAQ is: people who are unfamiliar with a newsgroup, but need to ask a question that would definitely fall into the topic of the newsgroup should check the FAQ first to make sure the question isn't already answered.

Even though each newsgroup's FAQ exists for the benefit of those who frequent that newsgroup, FAQs can still be of a tremendous value to everyone. For example, let's say you want to learn the basics of the game of chess. If this was the case, you could read the FAQ for the newsgroup **rec.games.chess**, which might give you some of the basics concerning the game. In other words, you can use FAQs to learn more about whatever topic is discussed by their newsgroup.

In addition to give the answers to frequently asked questions, FAQs often state the posting policies for their newsgroup. This information can be valuable to you if you ever decide that you want to start posting to the newsgroup. FAQs are usually posted on a regular basis to their newsgroup.

Thanks to the advent of Usenet archivers, you can now search Usenet articles (usually from recent months) for one or more words. These services are also helpful when trying to locate an article no longer on your Internet provider's computer. An example of a Usenet archiver is DejaNews (**www.deja.com**).

The newsgroups

As mentioned in an earlier section, Usenet is an international network of newsgroups, each with a specific topic. Keeping this definition in mind, we will define newsgroups as global discussion forums. Each newsgroup has a name, which looks like several words separated by periods (like **rec.music.makers.guitar**).

Although it might look confusing, newsgroup names are actually organized into a very easy-to-use system. Newsgroups are hierarchical. In other words, newsgroup names consist of categories and sub-categories. This system makes it easy for you to find newsgroups that might be interesting. The periods that separate the categories are called "dots." Using this naming system, **rec.games.chess** would be pronounced as "rec dot games dot chess."

The first category used in newsgroup names is called the top-level category. In **alt.tv.seinfeld**: *alt* is the top-level category; *tv* is called the second-level category; *seinfeld* would



Figure 1: Some of the newsgroups specifically for Argonet users

be the third-level category, and so on.

Newsgroup categories

There are many top-level categories used in Usenet. Some are used only in their home country (like *uk*, which is used in the UK). Others restrict their use to a single city (like *la*, which is used in Los Angeles, California). Every state in the US has its own top-level category, as well as many colleges, universities, and large corporations (eg microsoft). In this article I will only discuss top-level categories that are large, publicly used, and international. The following sections separate the major top-level categories into their appropriate groups. "The Big 8" are the main categories:

comp	computer related
k12	education (kindergarten to 12th grade)
humanities	what it says
misc	miscellaneous
rec	recreation
sci	maths and science
soc	public & social issues
talk	controversial issues

Discussion in these groups is usually pretty straight-forward and on-topic. The "comp" groups can be quite technical, dealing with topics like artificial intelligence and computer programming. There are also a few groups for beginning computer users, however. Most of the "k12" groups are used for the discussion of school subjects from elementary school through high school — though naturally this has a very strong US bias, for the UK it's better to use the **uk.education** hierarchy. These groups can be a good resource for parents or students having difficulty with homework or a report. There are also some k12 groups that are devoted to general "talk" among students.

As the name suggests, the *misc* groups cover a wide array of topics. Basically, anything that doesn't fit in any of the other top-level categories goes in misc. The misc category isn't as big as you would think, though. This is probably because most of the groups that "don't seem to fit in," go in the *alt* category.

The *rec* hieraatchy has some of the most popular groups in "the big eight." These groups discuss everything from music to travel to board games. Also included are many "hobby groups," like amateur radio, Boy and Girl Scouts, off-road motorcycle racing, and gardening. As in the comp groups, the *sci* groups can also get quite technical, involving discussions about subjects like advanced Calculus, biochemical engineering and medical procedures.

Most of the *soc* groups discuss topics like politics or current events, in addition to some of the less serious topics like **soc.penpals**. Be forewarned: discussion in any political Usenet group can get pretty heated, so be careful of what you say. Some of the most unusual discussions in "the big eight," newsgroups come from the talk groups, where topics like UFO sightings, celebrity gossip and cross-dressing are not uncommon.

"The big eight" newsgroups differ from other newsgroups in several ways. First, they form the largest part of Usenet (in English-speaking countries). Second, they are the most "organised" of the Usenet groups. All new "big eight," newsgroups must be voted on first, which reduces the number of "joke groups" and repetitive newsgroups.

Finally, they are completely public groups. There is no central business operating these newsgroups, unlike some other top-level categories. It is in "the big eight," newsgroups that you will find the greatest percentage of messages being on-topic, and discussion in these groups tends to be more orderly than that of the *alt* groups.

The alt-ernative

Originally an acronym for Atheist, Lunatics and Terrorists, the alt category has since come to be known as the "alternative" newsgroup. The general philosophy surrounding the alt category seems to be, "if a group doesn't belong in the big eight groups, it belongs in alt." This is evident in the fact that absolutely no votes are required for an alt group to be created (although a discussion in **alt.config** should always be initiated). This has resulted in the alt category being by far the largest top-level category in Usenet.

The *alt* category is also home to some of the most interesting and unusual discussions in Usenet. Everything from architecture to the JFK conspiracy is covered in alt, in addition to the many binary groups, where you can find programs, pictures, and sounds (all of which are in UU-encoded format). The freedom of newsgroup topics in the *alt* group does come at a price, though. The alt group is also home to dozens of "joke" groups such as `alt.tv.dinosaurs.barney.die.die`

And the others

The *news* top-level category serves three main purposes:

• Provides information for people new to Usenet.

• Is used by "Usenet administrators" as a place to discuss and vote on new newsgroups in "the

big eight" categories. Also used to discuss group moderation practices and the removal of unused newsgroups.

• Used as a clearing house for information on newsreaders, Usenet server software, and so on.

Two of the best newsgroups for people new to Usenet are **news.announce.newusers**, which has many text files about Usenet as well as individual messages, and **news.announce.questions**, which is used as a discussion forum for all general topics concerning Usenet.

Regional groups

Depending on your Internet provider, you might have access to some "regional" top-level categories. These are categories featuring newsgroups used by people in specific regions of the world. Most countries have their own top-level categories (which sometimes contain an entire Usenet system within themselves). Some examples are *aus* (Australia), *can* (Canada), or *uk* (United Kingdom) categories.

In addition to geography-based top-level categories, there are also many corporations and educational institutions with their own categories that your Internet provider might have access to. For example, people who use Argonet as their ISP have access to various argonet-related newsgroups as in Figure I.

All in Moderation

Many Usenet newsgroups are moderated. That is, all messages posted to the newsgroup are first sent to someone called a moderator by e-mail. The moderator then reads each message and decides which ones should actually be posted. While some moderated newsgroups indicate that they are in fact moderated by adding a .moderated to their newsgroup name (such as **alt.collecting.stamp.moderated**), it is not actually required to do so.

Most newsgroups decide to have a moderator because they either deal with a sensitive topic or because a former group discussing the same topics became filled with too many off-topic messages. The results of having a group moderated are usually as follows:

• Absence of off-topic or irrelevant messages;

• 1-3 day extra delay in time it takes for posted messages to appear;

• Repetitive messages are sometimes summarized by the moderator and posted as one message;

While having a moderator would be an advantage for many newsgroups, it is often difficult finding someone with the time and will to serve as a moderator (most are not paid — and if they are, it is definitely not worth the effort financially).

If you find a group that is moderated, the best thing to do is to wait until the FAQ is posted and see if the group has any special instructions for posting. In most cases, you can post to the group in the same way as you would an un-moderated group.

An example of a moderated group is **comp.sys.acorn.announce**. The moderator in this group ensures that messages posted to the group are announcements related to Acorn and RISC OS computers.

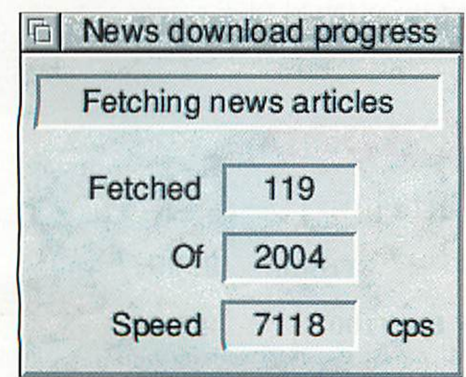


Figure II: Getting your news articles downloaded

Finding newsgroups

With over 32,000 newsgroups in the Usenet system, finding a newsgroup that you would be interested in can be tricky. However, there are some things you can do to narrow down your search. First, use the newsgroup naming system to your advantage. Depending on your newsreader, you might be able to use a search filter to isolate newsgroups with a certain search string in their name. If you can only view newsgroup names by category, try to think of which category the desired newsgroup would be under.

If your newsreader doesn't provide any way of searching your Internet provider's list of newsgroup names (and unfortunately not many on RISC OS do), your next best bet is to use a service that allows you to search the names and descriptions of most available newsgroups. DejaNews, for example, offers such a service.

Reading Articles

As with most "other" uses of the Internet, to be able to read and post articles on Usenet you will need a piece of client software known as a "newsreader" which work by communicating with your Internet provider's news server and displaying the information in a user-friendly format.

There are a number of newsreaders available for RISC OS — some shareware/freeware and others commercial. See the resources section at the end for more information.

RISC OS client software can be divided into two categories. The first of these are news "fetchers" — which connect to your ISPs news server and download selected newsgroups to your local computer. There are a number of freeware "fetchers" available, such as *Newshound* and Internet suites such as *Voyager* and *InetSuite* which have them built in.

A fetcher takes the newsgroups that your are subscribed to (the ones you wish to read messages from) and downloads all new messages from that group. Most fetchers can be configured to download a maximum number of articles, for groups which get very busy. Figure II shows the *Voyager* news fetcher downloading news items.

Next month we'll conclude our look at newsgroups and mention one last way of using the Internet in a slightly different way.

Browsin' on a rainy afternoon

David Dade starts an exploration of the current crop of RISC OS browsers

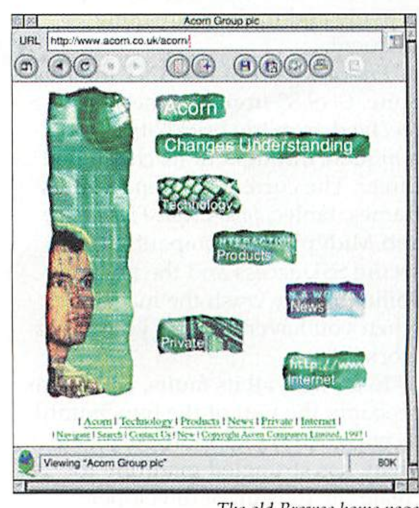
The World Wide Web started life as a knowledge-sharing tool, giving academics and scientific users access to information outside their own environments. Its potential as an advertising medium was soon realised, and entertainment value was introduced to disguise the hidden persuasion. Big business interests pushed on the development of Web e-commerce to eliminate the middlemen and recover lost layers of profit margin.

How successful a Web browser design is depends on what you want it to do. RISC OS users currently have a choice of four or five browsers of varying age and ability, ranging in cost from freeware to commercial, and in support from backwatered to ongoing. While all of them can display pages that contain textual information, many pages designed for Web entertainment and e-commerce are more of a challenge for RISC OS browsers.

Browsing the browsers

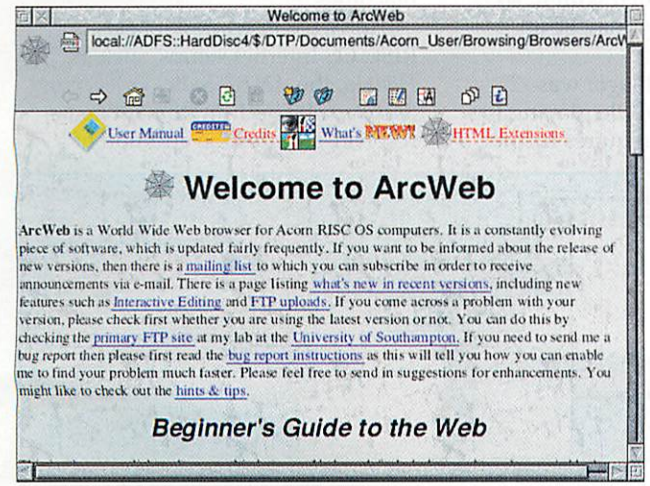
ArcWeb by Stewart Brodie (freeware) was the archetypal freeware Web browser first shown at the Acorn World show in 1994. In the next three years it gained features including frames support, cookies, e-mail sending, interactive page editing and FTP upload. Unfortunately HTML tables have not been implemented in release versions, reducing *ArcWeb's* ability to render acceptably the intended page layout of many of today's sites. *ArcWeb* is unlikely to be updated from the 1997 version 1.92.

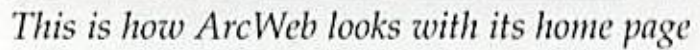
Cut off in its prime by the Acorn debacle, *Browse* (was £39) nearly became the official Acorn flagship Web browser. Some of its Acorn authors now work for *Pace Micro Technology* who owns the source code. The last released version of *Browse* can display frames, tables and many HTML 4 tags, PNG images, *Flash* and *Java* but not *Javascript*, and could access secure socket layer (SSL) encrypted pages when the UK-only Acorn SSL module was present. Users report a number of bugs but further development and support seem unlikely.



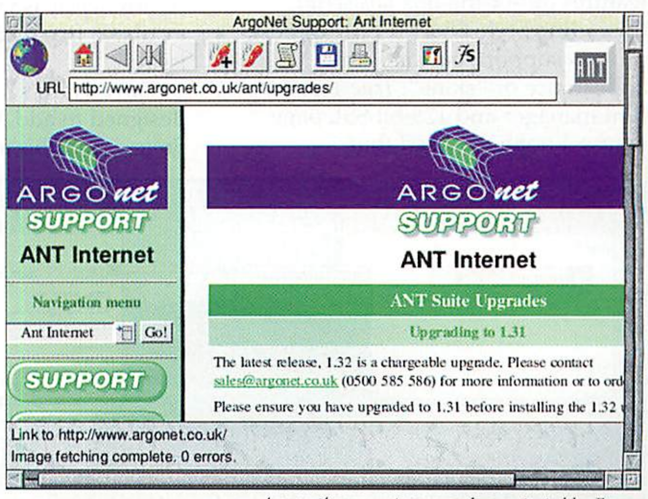
The old Browse home page

WebsterXL (£25 from R-Comp) Andrew Pullan's original freeware *Webster* browser was the only competition to *ArcWeb* in the early days, but was taken up as a commercial product by R-Comp in 1997. Reborn as *WebsterXL*, it now supports frames, forms and tables,

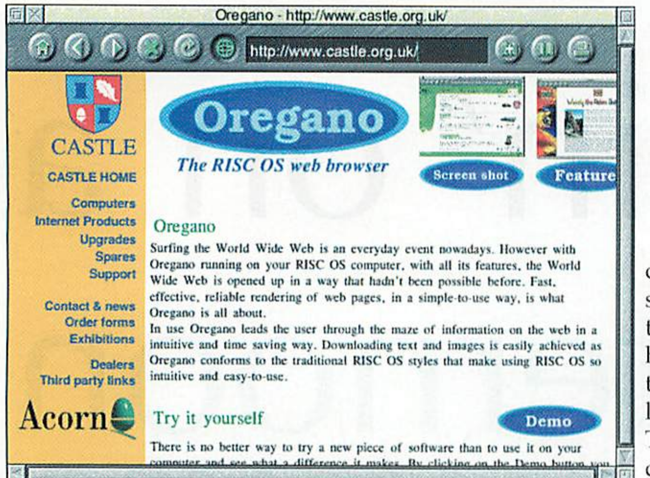




This is how ArcWeb looks with its home page



Argonet's support page as demonstrated by Fresco



...and finally, Oregano, stylistically different but the latest of them all

plug-ins such as *Java* and *Flash*, secure page SSL access, *Javascript* and other ongoing enhancements. Support and bug-fixing development is lively and updates are quite frequent.

Fresco© (part of the ANT Internet Suite, £119.85 from Argonet) has received as many brickbats as bouquets throughout its chequered career. The current version features frames, tables, *Javascript*, *Flash*, *Java* and Midi plug-in compatibility, secure SSL access and the uncanny ability to only crash the machine when you haven't saved your other work.

Even with all its faults, *Fresco* was probably the best of the bunch until recently. Argo's support guru Paul Vigay has struggled manfully to create the illusion of developer interest with his own patches and fixes, but any further real updates seem like castles in the sky.

Oregano (£49+VAT from Castle Technology / Oregan Networks) could be the killer app to fulfil all our requirements for a RISC OS browser to compete with our *Windows* and *Mac OS* counterparts. It features out-of-the-box *Javascript*, Cascading Style Sheet (CSS) support, plug-in support, customisable appearance or "skins", *True Type*® font manager and 128-bit SSL page access. I hope the fixed (but configurable) font styles and inability to retain global history files will be temporary, but it's looking good so far. There is ongoing development and support via a mailing list.

Plugging the plug-ins

Using the Acorn Browser plug-in protocol anyone can write one, and one of the most impressive is *Flash*, ported from Linux by Leo Smiers. *Flash* plays Macromedia Flash files but is quite memory hungry, often needing 4Mb of RAM to itself just to display a moderately sized *Flash* presentation. This may confine its usefulness to Risc PCs and A7000 owners, so version 0.49c is for RISC OS 3.5 and up. *Flash* works well on a suitable machine with *Browse*, *WebsterXL*, *Fresco* or *Oregano*.

The sound support in *Flash* was added by Henrik Bjerregaard Pedersen, who has written several other plug-ins including a VRML viewer that also requires elements of Sincronia's *TopModel* to be present.

Acorn's *RisCafé* Java CD was released at the same time as *Browse*, and runs as a plug-in with the later browsers. Although many Acorn users will have bought the *RisCafé* CD, it is no longer available.

Warm Silence Software have a *Sound* Plug-in that will play AIFF, AU, VOC, WAV, WVE and SND files. Acorn *Replay* is included with it, so available free memory may be an issue.

Dave Ward's *MidiPlugin* was designed to add MIDI file playing to *Browse*, and this also requires further support from either a hardware or software MIDI synthesizer, such as Expressive Software Projects' *Synth* on the RISC OS 4 Installation CD. Dave's plug-in uses Rob Smith's *Ethereal* module to play the MIDI file.

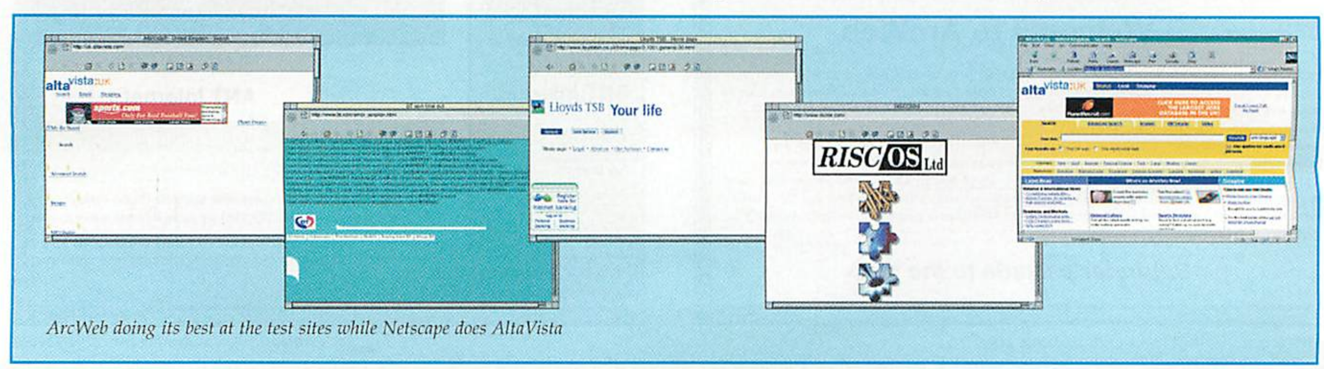
A *Real Audio* player plug-in for RISC OS is desperately needed, but so far only the freeware version by Kira Brown and Justin Fletcher is available and it will not play streaming audio, which is the most commonly required action. WSS are also reported to have developed a StrongARM-only version but are unable to release it due to licensing issues.

ArcWeb revisited

If it wasn't for the popularity of HTML tables for defining page layouts, *ArcWeb* would still be a very suitable and cheap browser. When Stewart Brodie was last working on it in 1997, users wanted Frames support, but in hindsight good table handling would have given *ArcWeb* a longer life. Frames are less fashionable these days.

Installation instructions that include troubleshooting questions and answers are provided with *ArcWeb*. There are some other icon button schemes (hardly "skins" though) in the archive, as well as applications and additional modules that may be required, although many users' machines will already contain newer modules by now. *ArcWeb* takes about 1Mb of memory at start-up which may be an issue for earlier machines.

ArcWeb will work with existing RISC OS Internet setups, such as *DialUp*, the *ANT*© *Suite*, *Voyager* and *Socketeer*. Its built-in domain name resolver requires the addition of a



ArcWeb doing its best at the test sites while Netscape does AltaVista

small configuration file inside Acorn's *Internet* or Freenet's *FreeUser*. *ArcWeb* manages to display frames without the help of the subsequently introduced RISC OS *Nested Window Manager* module.

I selected four Web sites to test the browsers: The search engine at uk.altavista.com, a corporate site at www.bt.com, an online banking site at lloydstsb.co.uk and the RISC OS Ltd Web site at www.riscos.com. The same pages displayed by *Netscape Communicator* 4.75 on a PC are shown for comparison.

ArcWeb didn't do well at any of them because of the tabled layouts at all these sites, but other sites with information pages of plain text with simple formatting are perfectly readable. This is an example of a browser ideal for information retrieval but not able to deal well with pages of tabled layout just for entertainment or for e-commerce.

Browse reloaded

Browse was just beginning to show promise when work was stopped. It could give a good showing compared with its nearest competitor, ANT Ltd's *Fresco*, and seemed a lot more stable. *Browse* was designed to use the newer RISC OS "nested" window manager, and so running it required some extensive modifications to a machine's *!Boot* start-up sequence.

This was to be achieved by installing a new *!Boot* application from the CD on which *Browse* was supplied, which meant that a CD-ROM drive was more or less essential. *Browse* also makes use of the *Toolbox* modules. Designed to simplify application programming, this series of pre-loaded programming library routines also take up precious memory space. Earlier Acorn machines, even those with the maximum 4Mb of memory, begin to have problems with graphically intensive Web browsing.

One feature of the *Browse* installation which can usefully be used with other Internet applications is the Acorn *!Webserve* HTML server and cache, which can function for a small network as a proxy server. When used as a proxy, *Webserve* sits between Web browsers and the network, isolating them from external access.

Browsers on the local network or sometimes even on the same machine, can be configured to communicate only with the proxy and not directly to the rest of the network or to the Internet at large. The proxy fetches Web pages through a network gateway and stores them locally for faster access by the browser.

As we shall see, Oregan Networks' *Oregano* browser does not currently cache its fetched page elements, so returning to a previously viewed page requires re-fetching all the elements from the Internet. A proxy server such as *Webserve* or Justin Fletcher's freeware *!JFProxy* can be used to speed up re-access.

There is an unofficial *Browse* mailing list for interested users run by Carl Pfeiffer. To join send an e-mail to **majordomo@riscos.man.ac.uk** with the text "subscribe browse" in the body. Now that the Acorn Web site has finally gone forever, by special arrangement Carl's Web site has the last upgrade from version 2.06 to 2.07 available for download by existing *Browse* owners.

Some other resources may be required, such as the *ToolBox* modules which can be found on the *RISC OS* Ltd Web site at **http://developer.riscos.com/public/Updates/**

Although most retailers have sold their last copy of the *Browse* CD long ago, there may still be a few left somewhere. At the time of writing there was at least one copy on the shelves of *Wardlaw Surveys* of Inverness, Scotland. You might just be lucky if you phone +44 01463 831214.

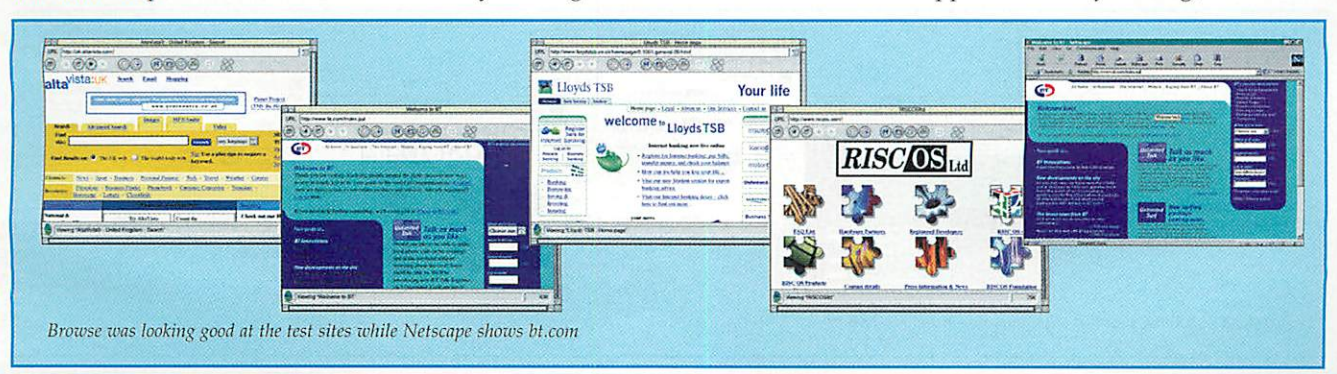
I understand that one of the original *Browse* coders, Andrew Hodgkinson has a later version waiting "on hold" at *Pace Micro Technology* for some limited spare time development work, but this could only ever be for bug fixes and small enhancements. *Browse* may never be developed further, but those who own a *!Browse* CD also have a unique part of Acorn's history.

Work with WebsterXL

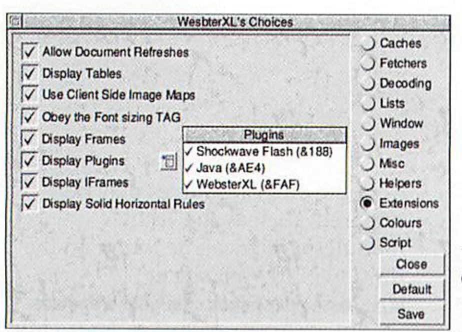
WebsterXL is constantly being updated, and version 1.96u was released at the RISC OS 2000 Epsom show. *WebsterXL* can be supplied as a stand-alone application, or with R-Comp's new *DialUp* Internet connection software, or as a complete Internet Suite with *Messenger Pro* e-mail and news reader.

Installation is simply a matter of dragging *WebsterXL* from the floppy to a hard disc directory of your choice. I have a separate directory for browsers, but most people start by creating an Internet directory which can also accommodate *DialUp* and *Messenger Pro* if included.

As soon as you start browsing, beside *WebsterXL* on the iconbar appears the *Webfetch* dog, which



Browse was looking good at the test sites while Netscape shows bt.com



WXL Configuration all buttoned up

fetches pages for the browser to display. *WebsterXL*'s iconbar menu offers numerous setup options which default to sensible values. Usefully here you can turn *Javascript* off if a page is giving trouble due to poor or incorrect script programming; an all-to-common occurrence.

The Extensions section shows what plug-ins are enabled, such as *Flash* and *Java*. *WebsterXL* is currently the only RISC OS browser to properly support the FONT FACE tag, mapping popular *PC*, *Mac* and *Unix* fonts to RISC OS equivalents, such as *Arial* to *Homerton*. When running, *WebsterXL* and *WebFetch* take up at least 1Mb of memory, and more when Risc PC dynamic areas are allocated.

The functions available on the understated default grey button bar are described at the bottom of the window as you hover over them, and more options including saving images and links are obtained using the Menu button dialogue. WebsterXL does not redraw the page if the window is resized, only when reloaded. "Skins" — a term for appearance customisation I hate — are supported and design specifications for the enthusiast or sell-through customer are given on the install disc.

WebsterXL coped fairly well with most of the test sites, but had trouble with the *Lloyds TSB* banking site's cookie and *Javascript* code. I'm not too worried about this because R-Comp undertake to fix *WebsterXL* to "get you on" to a site that defeats your current version of the program. This is what customer service should be like.

It has to be said that *WebsterXL* is not the quickest-rendering RISC OS browser. Much of the legacy code is written in compressed BASIC, but more compiled code is being introduced in each new version.

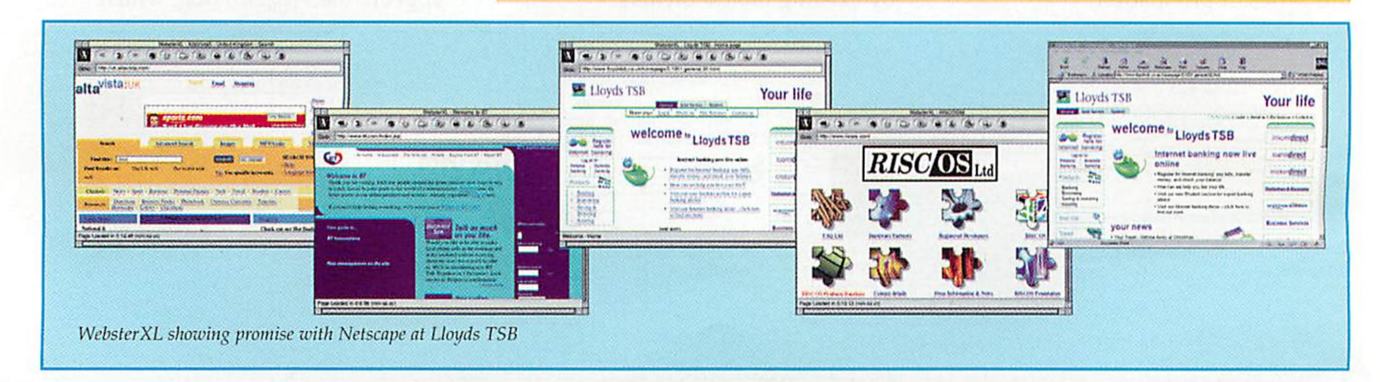
It's an interesting debate as to whether a browser should just obey the strict rules and standards of page markup, or be tweaked to work with what is actually encountered as well. *WebsterXL* gets it about right, and is improving all the time.

For your £25, you get reasonable *Javascript* interpretation, 128-bit SSL secure transaction support, good bookmark and hotlist management, persistent global history list, and tight integration into R-Comp's other products like *DialUp* and *HTMLEdit Studio*.

Next month we look at two other running contenders for the RISC OS Browser Derby, Fresco from Argo Interactive out of ANT Ltd, and Oregano from Castle Technology out of Oregan Networks. Place your bets now on the winner.

Where to get this month's browsers & plug-ins

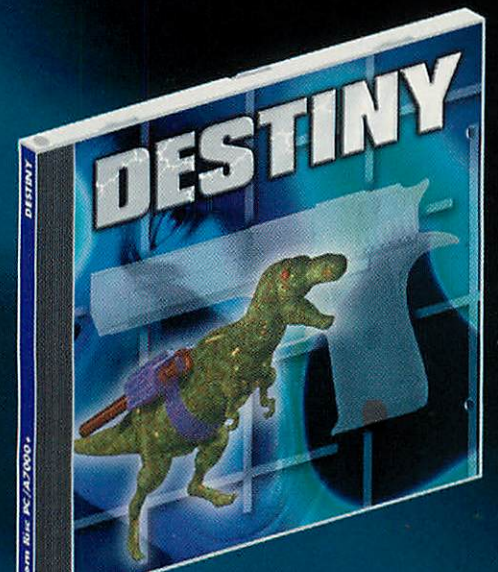
Product:	ArcWeb 1.92
Supplier:	Freeware
CD:	Foundation RISC User 3
Web:	**ftp://ftp.uni-stuttgart.de/pub/systems/acorn/acornet/long/communications/internet/arcweb.arc**
BBS:	Arcade BBS 020 8654 2212 or **www.arcade.demon.co.uk/filepages/file88.htm**
Product:	Browse 2.07
Supplier:	Acorn Computers Ltd
CD:	Not available, but last updates from:
Web:	**www.carlbob.freeuk.com/freeuk.com/c/a/r/carlbob/webspace/browse/**
Product:	WebsterXL
Supplier:	R-Comp, £25 (no VAT)
Web:	www.rcomp.co.uk
Tel:	+44 (0) 1925 755043
Product:	Flash (GNU GPL Freeware)
Author:	Leo Smiers
Web:	**http://people.a2000.nl/lsmiers/flash/flash.html**
BBS:	Arcade BBS 020 8654 2212 or **www.arcade.demon.co.uk/filepages/file88.htm**
Product:	Sound
Supplier:	Warm Silence Software, £10+VAT
Web:	**www.wss.co.uk/products.html**
Tel:	07885 487642
Product:	Midi
Author:	Dave Ward, Freeware
Web:	**www.sparkplug.freeserve.co.uk/Acorn/index.html**
BBS:	Arcade BBS 020 8654 2212 or **www.arcade.demon.co.uk/filepages/file88.htm**



WebsterXL showing promise with Netscape at Lloyds TSB

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from Acorn User and the RISC OS Dealers & Developers

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SC OS New Year

Free Ads

• WANTED: BBC Micro 'cheese wedge'. Just the case is required. An old 6502 second processor or teletext adapter case will suffice. E-mail **paul_jagger@uk.ibm.com**

• Lots of RISC OS software for sale at low prices! Please see **www.bergs.org.uk/acorn/** for the list, or call Robert on 023 8058 3195. Also four shelves of Acorn magazines & discs free to a good home. Buyer collects / pays postage. (Surrey)

• CJE 5x86 133MHz PC Card with 512k cache for the RiscPC. £120 ono. EESOX 'Fast' SCSI-2 podule with Teac 32 speed internal SCSI CD-ROM. £100 ono. Prices include postage within the UK. Telephone: 0151 733 5031 or E-mail: **chris@sawer.uklinux.net**

• A3000 2Mb AKF12 Monitor, tons of softrware, games, colour printer £40 inc p&p. Also 2nd slice for Risc PC and 4-slot card £60 inc p&p. 8-bit hardware available Tel: 0151 637 0993

• A3000 4Mb 170Mb HD; Citizen Swift-24 printer; A3020 2Mb; Citizen 120D printer; £125 the lot. Please ring Mick 01757 638643 (N. Yorks)

• A3010 4Mb, 340Mb IDE HD; 14in Philips colour monitor; Brother dot matrix printer. Style, FontFX6, EasyFontPro, SparkFS r/w, Sibelius 7, TalkWrite, Publisher, Artworks, Fireworkz & much more; £195 ono Tel: 0161 792 5152 or 07733 250394

• Twin Slice Strong Arm RiscPC for sale. CD-ROM, 16Bit Sound Card, MidiMax Card, APDL IDE Card, 48Mb RAM, 2Mb VRAM, 420Mb Hard Drive, Aleph1 586 PC Card, 14" AKF60 Monitor. Software includes; PCPro 3.06, PC Exchange, PC DOS 7, Serenade, Rhapsody 2, Rythm Bed, Pro Art 24, Ovation, Virtualise. All Manuals. £550 ono. Tel. (01270) 589489 (Crewe) Evenings Only, Buyer collects."

• A4 Portable, Referbished (Sept 2000) Battery Pack, 8OMB HD, Carry Case, Call Mike on 01671 402201 or **mike@hollybank.net** (Newton Stewart - Scotland) £300

• WANT A WEB SITE? Hire me, a fellow acorn enthusiast to write or maintain your website. For more information e-mail me: TEZZA@OATH.COM

• Risc PC 600, 4Mb, 550Mb HD, 4XCD-ROM, DX4-100 PC Card, software, loads of Acorn User mags. Offers? Buyer collects or pays postage. P.A.Wortley **LWA98PAW@ sheffield.ac.uk**

• A5000 4Mb Ram, 200Mb Disc, CD, Scanlight256, PC Card, 14" Monitor. £150 buyer collects. **strudwick@corn69.fsnet.co.uk** or 01904 687396 (daytime only).

• For sale: HP ScanJet 4200C USB scanner, 36bit colour, high resolution. Just moved from PC to RiscPC so selling to buy compatible scanner. For further details please email me or visit **http://www.hp.com** Comes with scanning and OCR software.

• For Sale: SA RISC PC OS 3.7 48 Mb Ram 2 Mb VRam 2.5Gb HD 32X CD 4Gb SCSI HD STORM 32 SCSI Interface 2 Slice 4 Slot BP RISC TV + Teletext Irlam Videodesk PC Card 15" Monitor Extensive Software £1000 (Willing to split) Phone Ed 01309 641386 email **Clink@ eggconnect.net**

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Getting much stronger

James Harper describes one of the two main RISC OS text editors

Shortly after 'Black Thursday' Guttorm Vik — the author of this excellent general purpose text editor — left the RISC OS platform for Linux, and it looked as if the chances of future improvements to the program had died along with Acorn. Luckily for us, however, the source code was released into the public domain and recently two programmers, John Whitington and Carl Hetherington, took over development.

With a new, dedicated Web site courtesy of the Icon Bar and a couple of updates already under their belts, things are looking up, and now seems a good time to take a look at a few of the features of a program which my PC and Mac owning friends can only eye enviously.

Unlike *Edit*, the very basic text editor supplied with the operating system since goodness knows when, *StrongED* can have different 'modes' of operation. At a basic level, a mode is simply a collection of options defining keyboard shortcuts, colours, macros and so on. Whether you're editing HTML, working with taskwindows, or even writing a whole application in BASIC or C, *StrongED* has a mode to help.

To create a file in a specific mode, use the 'Create' sub-menu from the iconbar menu or Adjust-click on the iconbar icon to access it directly. Clicking on one of the entries will open an editing window in that mode. At the top of the menu is an entry called 'BaseMode' — this is the mode you get by default when you click with select on the iconbar icon and it is used for editing plain text.

Once you have created a text, the first thing you'll notice is that, unlike *Edit*, *StrongED* has a toolbar across the top of the window. Opinion on the usefulness of a toolbar in a text editor seems to be divided. Some people much prefer clicking on buttons to wading through menus, and I think it makes *StrongED* more approachable to the novice user. Others dislike it because it takes up useful space and almost all of it's functions are available from the keyboard. Luckily, for those who prefer an uncluttered work area, it can easily be turned off.

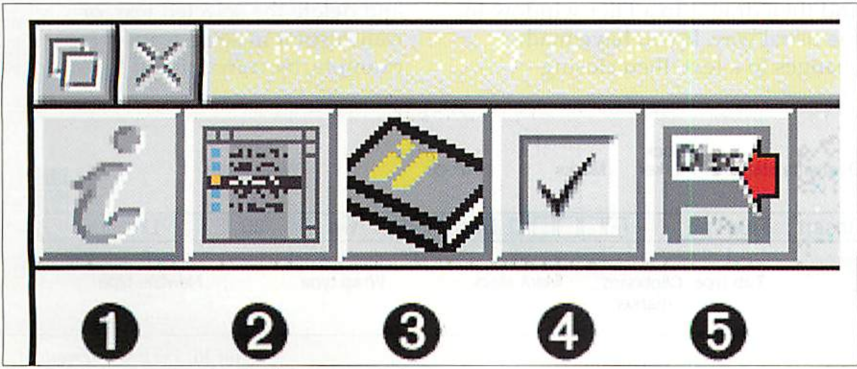


Figure I: The BaseMode toolbar in all its pixellated glory

The toolbar

The BaseMode toolbar is shown in Figure I, with the buttons labelled 1 to 5. Other modes may have extra buttons, but all modes possess these five, and we'll go through their functions in turn.

Button gives access to the popular *StrongHelp* hypertext manual program, also written by Guttorm Vik. Clicking on it with select will run *StrongHelp* (provided it has been 'seen' by the Filer), and load *StrongED*'s reference manual, whilst an adjust click will search through *StrongHelp*'s manuals to find any reference to the word under the cursor. Shift-select clicking will bring up the File info window (Figure II), which provides information about the file currently being edited, and also allows you to count the number of words.

The next button on the toolbar is a useful aid when working with more than one open file. In fact *StrongEd* makes working with many different files at once very easy. Pressing Control+Shift+H will 'hide' all open files. You can then use Shift+Down to open the List of Texts window. Keep the Shift key held down and use the up/down arrows to highlight the text you want to work on. Release

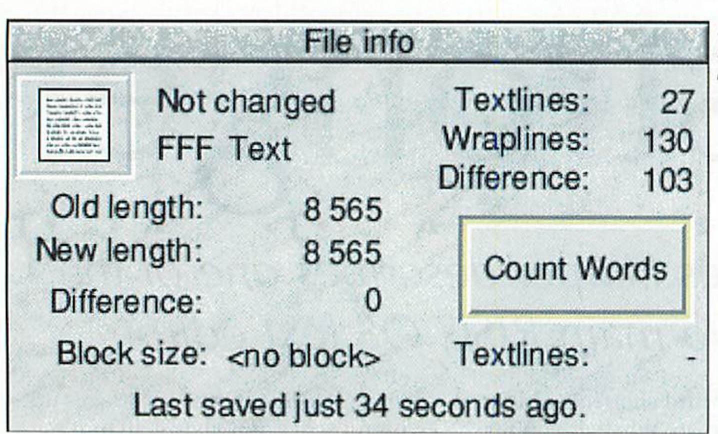


Figure II: The File info window, facts at your fingertips

Shift, and the selected text will pop to the front of the screen. It is this 'List of Texts' that will be opened by clicking button. This time however, the window will be kept open, and you can then click on a text to bring it to the front or call up a menu allowing you to save or kill all changed or unchanged texts.

In the last version written by the original programmer, *StrongEd* gained a very useful spellcheck function provided by Computer Concepts' (remember them?) Impression Spell module. If you don't have Impression, don't worry, as a copy of the module is provided with the 'Junior' version of the program, freely downloadable from CC's web site.

Copy the module inside **!StrongED.Tools**, and run the 'SpellFix' program which should be there. It seems that the original Spell module has a bug in it, and this patches it so that it works. A click of icons will now check your text for you, producing a list of suspicious words. Adjust-click and *StrongED* will instead open a dialogue box allowing you both to replace incorrect words and to save out 'user dictionaries' containing unrecognised words which you want ignored. A further option, available via the main menu, allows full 'check as you type', with *StrongED* either bringing up the spell dialogue, or simply highlighting the word in red.

The next button along opens up the Global Choices dialogue box on a Select-click. Here you will find options concerning how *StrongED* loads files, whether it is to be used for editing taskwindows, what type of cursor to use and so on. These controls apply to the whole program, regardless of which mode it is in. To obtain mode specific options, just use Adjust instead of Select. Here you can decide what colours to use, whether or not to display the toolbar and Infobar, and many other options besides.

Clicking the final button will, as can probably be guessed from the disc icon it displays, bring up *StrongED*'s Save window. From here you can set the filetype you want your text saved as, give it a name, and then drag it to a Filer window in the usual way. If you have made changes to a text, then closing *StrongED*'s main window will also pop up the save box, this time with an extra option visible, allowing you to 'kill' the text as well as saving it. After saving your text the title bar will change to reflect the full filename and from now on it is possible to save the text immediately, without opening a window, by adjust-clicking on the save icon.

We want information

Having covered the basic toolbar, we'll now look at the Infobar at the bottom of the window. As it's name implies, it's main job is to display information about some of the text's attributes. It also provides access to some useful menus. Figure III shows the Infobar and all it's various parts. There are too many to go through them all here, so I will concentrate on a few of the more important ones.

The bottom left-hand field shows the current file position. The first number shows how far along a line the cursor is, measured in characters from the left-hand edge of the window. The second is measured from the top, and shows the textline number. Clicking select on this field (or pressing F5), will pop up the 'Goto' window, allowing you to jump to a particular line.

The 'block marker' will display a 'B' if a block of text has been 'marked' (selected with the mouse), and a 'b' if a block has been marked in another text. Clicking menu on the field will then bring up the 'process' menu, allowing you to move, copy and delete the selected text, or transform it in some way — for example, by converting it to lower

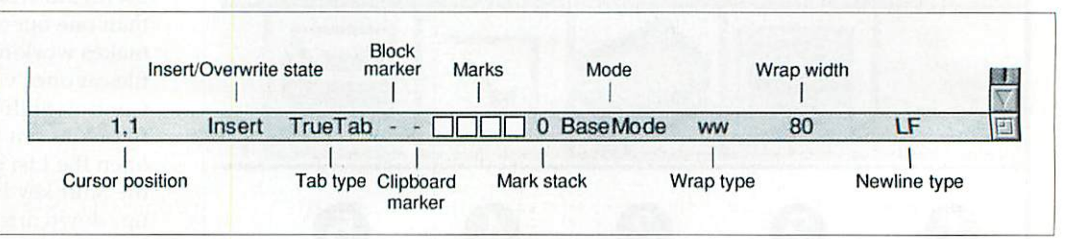


Figure III: The Infobar explained...

case. *StrongED*'s block handling is remarkably flexible.

Once some text has been marked, simply hold down select over it and a file icon will appear, enabling you to drag'n'drop the text to a new location, and even save it out directly. *StrongED* also has a unique ability to mark out a rectangular area of text — known as a 'freeblock'. This is achieved by holding down the Alt key while Select-dragging and is very useful for moving around distinct columns of text, such as data from a CSV file.

Next to the block marker is the 'clipboard marker', which works in much the same way, displaying 'C' or 'c' depending on whether *StrongED* or some other program has something in it's clipboard. As *StrongED* supports the global clipboard protocol, it is easy to cut and paste back and forth from *StrongED* to other applications such as *Ovation Pro*.

Just to the right of the clipboard marker is a series of mysterious white squares. These are the 'marks' and they work a bit like bookmarks in a Web browser. Click on one with Adjust and it will turn black. The position of the cursor in the file has now been remembered. If you lose your place in the file, simply click Select on the mark and you will return to your previous position.

Where was it?

Before taking a look at how mode files work, I want to say a bit about *StrongED*'s search options. The quickest method of searching through a file for a specific word is to use the 'interactive search' dialogue box, obtained by pressing F4. This searches through the text as you type, just carry on until the word is found. The word you are looking for may crop up more than once in the text, in which case you can use the up/down arrows to jump to the previous/next occurrence of the word.

If you want to find all occurrences of a particular word or phrase, you had much better use the 'List of Found' function. The List of Found dialogue (Figure IV), is opened by pressing F2, and, unlike an interactive search, allows for complex search expressions to be used. It also has an option to let you search all open files instead of just the current one. When you have entered your search string, simply hit return or click on 'GO' and *StrongED* will display the results in a separate window, from where you can click on the lines you want to go to.

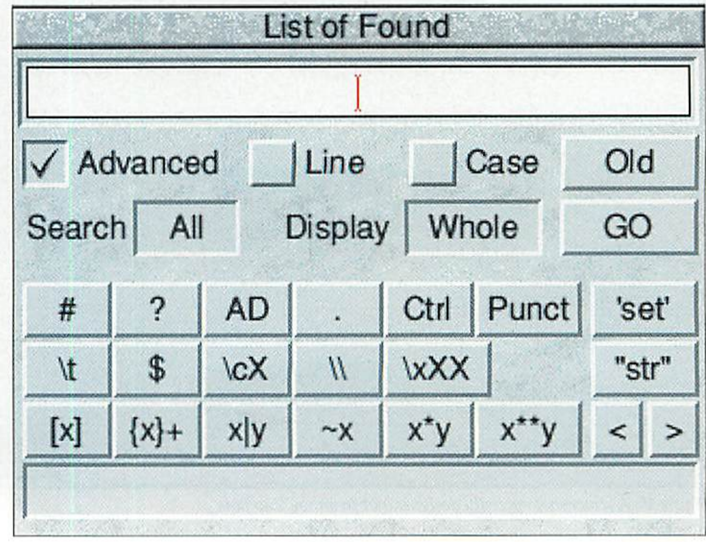


Figure IV: The List of Found window displaying its 'Advanced' searching options

Finally, there is the full 'Search and Replace' dialogue box, opened with Shift+F4. This offers all the same options as the List of Found function, but has an extra writable icon for your replacement text. If *StrongED* finds the search string in the file, the word(s) will be highlighted and up will pop the aptly titled 'What now?' window. This has buttons marked 'Next' — which will jump to the next occurrence of the word; 'Replace' — which will substitute your replacement text for the highlighted word; and 'replace All' — to perform a global replace operation on all found words. All three of these options can be controlled from the keyboard by pressing Control plus N, R, and A respectively.

In the mode

Mode files contain all the configuration options which are too cumbersome to put in a dialogue box. These files, which live in **!StrongED.Defaults.Modes**, are also how StrongED sees that a mode exists, and the name on the 'Change mode' menu is simply the name of the file inside StrongED. As the help file says, with all these modes it would be no fun at all if we had to manually select which one to use every time we loaded a file.

To avoid this we have the 'Mode When' file, which also lives inside the 'Defaults' directory. This decides which mode should be used, based on the filetype, pathname and contents of the file. The 'Defaults' directory can be opened by Shift+Adjust-clicking on *StrongED*'s iconbar icon. Alongside the 'ModeWhen' file and the 'Modes' directory you will also see here a directory called 'Bitmaps'. *StrongED*, unlike a word-processor, does not use the standard RISC OS outline fonts.

Instead, it uses bitmap fonts — sprite files containing all the characters it needs. Open up the Bitmaps directory and you will see the five different 'fonts' supplied with *StrongED*. 'System' is the one *StrongED* uses by default, but as we

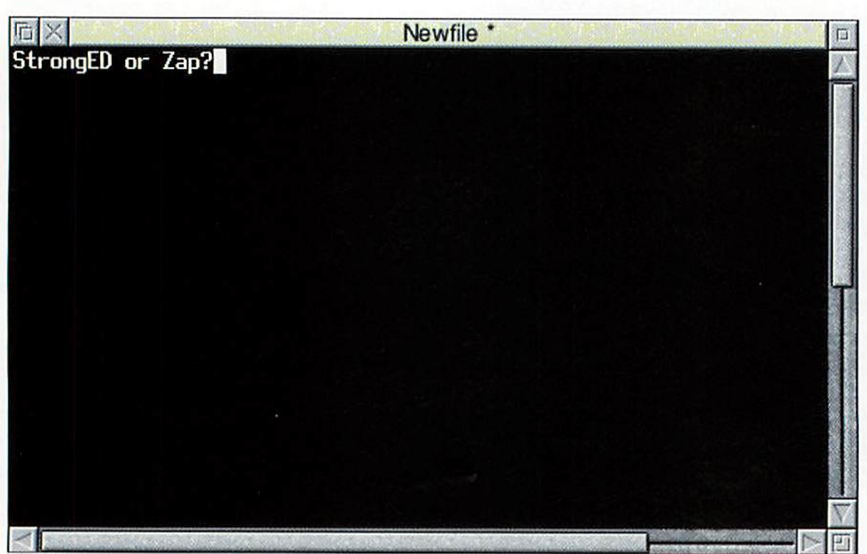


Figure V: A screenshot specially designed not to annoy Zap fans

will see, this can easily be changed.

Close the 'Bitmaps' directory and open up the one called 'Modes'. All of the modes are just text files, although some of them are parcelled up inside what look like applications, along with extra sprites they need for buttons. Keeping these sprites separate from the main application means that they will only be loaded if/when the appropriate mode is selected.

Double-clicking on one of these 'application modes' will open it up (no need to hold down Shift), and the mode file within it can then be edited like any of the others. The file we are interested in, however, is the BaseMode, as this is where the font is defined. (Remember, by the way, to take a backup of any file you edit, just in case something goes wrong!)

Load up the BaseMode file, and look for the line near the top starting with the word 'Bitmap'. This is followed by a couple of tabs and then the name of the font to use. Try deleting 'System' and typing in the name of one of the fonts in the Bitmaps directory. The only one you should never use is 'Control', as this font is only used to display embedded control characters in 'foreign' files. Now save the BaseMode file and quit *StrongED*.

When you reload you should now find that text is displayed in your chosen font.

If, like me, you don't find any of the standard fonts particularly exciting, fear not. The text editor Zap has a large collection of fonts, and there is now a program available to convert appropriate Zap Fonts into sprites suitable for use with *StrongED*. Called *StrongFnt* and written by John Whitington, it is available for download from the main *StrongED* Web site. A large selection of Zap Fonts can be found at **www.zap.uk.eu.org**.

And by sheer luck both these Web sites were on the the last *Acorn User* CD. As Figure V shows, using one of these fonts, with a white on black colour scheme and the toolbar and Infobar turned off, *StrongED* can now take on the appearance of it's arch rival.

I will now take a very brief run through the other commands defined in the BaseMode. Just beneath the font option is a rather scary looking sequence of commands to do with syntax colouring. (*StrongED*'s manual details all these if you're feeling brave.) This section identifies and colours URL's in the text, and they will then be launched when double-clicked.

This works for e-mail addresses as well, and gives you the ability to use a plain text file as a simple Internet hotlist. Scrolling further down the BaseMode file will bring you to various keylists. All of these are editable, so if you don't like some of the default keypresses, you can change them to suit you. Beneath the 'Global keylist' are the options which define entries on the mode menu and toolbar.

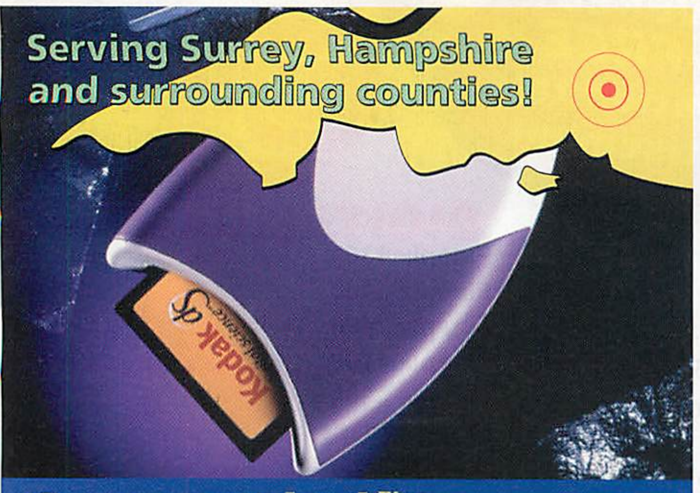
Again, these functions are fairly well documented, and once you get the hang of it, editing existing functions or even creating your own toolbar buttons is not that difficult. Take a look at the other modes to give you some ideas. The final section, at the very end of the file, is a list of macros — short sequences of characters which, when entered, will be replaced with a longer piece of text. You could, for example, define your initials as a shortcut which then expands into your full name and address.

Conclusion

I hope that I have managed here to cover some of *StrongED*'s most important features. I will finish by urging anyone who is still grappling with *Edit*, or finding themselves struggling with the very good but very technical *Zap*, to download the latest version and take a look for themselves. With more people using the program and sending feedback to the authors, this already top-notch program can only get better. END

Resources

Program	StrongED
Author	Guttorm Vik and others
Status	Freeware
URL	**www.stronged.iconbar.com**
Program	StrongFnt
Author	John Whitington
Status	Freeware
URL	As above



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Big brother RISC OS

Robert Dimond is watching you...

At this very moment a factory in Wolverhampton, Shropshire is being watched. Not particularly interesting, except in this case, 'Big Brother' is a trusty Risc PC, for this is the site of the prototype of a RISC OS-based CCTV recording system. What follows is a short account of how and why this happened, together with some possible ideas for the future.

I can trace this project back to a phone call I received in early July from a friend, Matt, who had been lumbered with a security project for the above-mentioned factory. They had been going through a bad patch of vandalism and break-ins and were interested in a CCTV recording system with a number of cameras.

They were interested in the possibility of using a computer to not only record time lapse from the cameras, but also to control a 'dial up' system to look around the factory from home. Matt had quotes for a number of systems but all of them were far too expensive and so he wanted my advice. And I said, without thinking, 'a Risc PC could do that!' and that was it; we agreed that I would build a prototype.

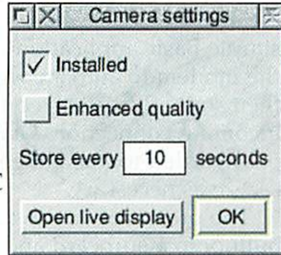
The hardware was the first priority and my faithful, brilliant and perhaps ever so slightly slow, non-SA Risc PC formed the base for the first prototype, together with an Eagle M2 card to capture the images.

To switch between the cameras I had to build some hardware (a multiplexer), so it was a browse through the Farnell catalogue to find some suitable analogue switches to be interfaced to the I2C bus via the very useful PCF8574 chip.

The job of the multiplexer is basically to switch between the cameras, grabbing an image after each switch. The use of analogue switch IC's makes the multiplexer completely solid-state and so, hopefully, very reliable.

Going soft

The next task was the software. I had to be careful here, since the recorder needed to be reliable enough to run for weeks on end. For this reason the task is split into three separate applications, a player, recorder and dial-up server. All the software multitasks in the RISC OS desktop.



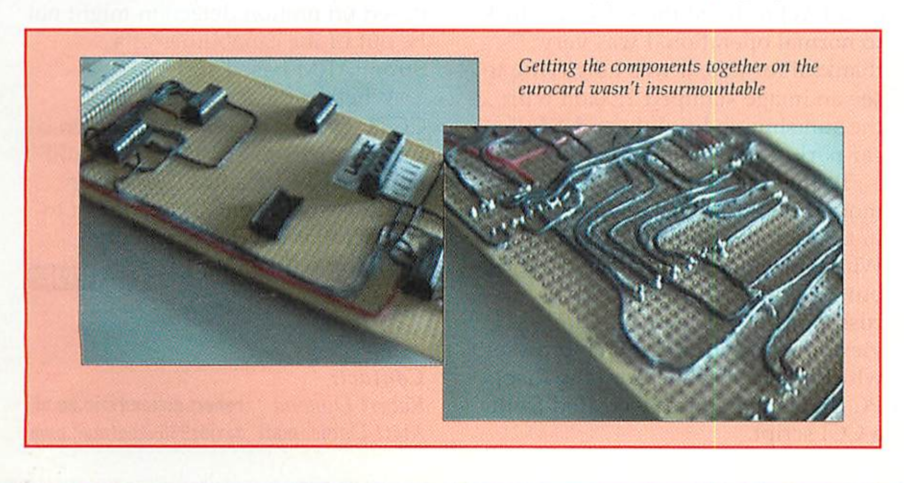
The recorder application has a RISC OS front end which allows the rate of capture to be set for each camera. An enhanced recording mode can also be set here, where images are captured at four times the resolution giving vastly increased clarity with a good CCTV camera. The capture interval can be set to one second or more, although if many cameras are running the system will just do the best it can to get as close as possible to the capture rate.

One click and the system is running, capturing images from the Eagle card, which can be previewed 'live' and JPEG compressing the images straight to the hard disc, using the Independent JPEG Group's library.

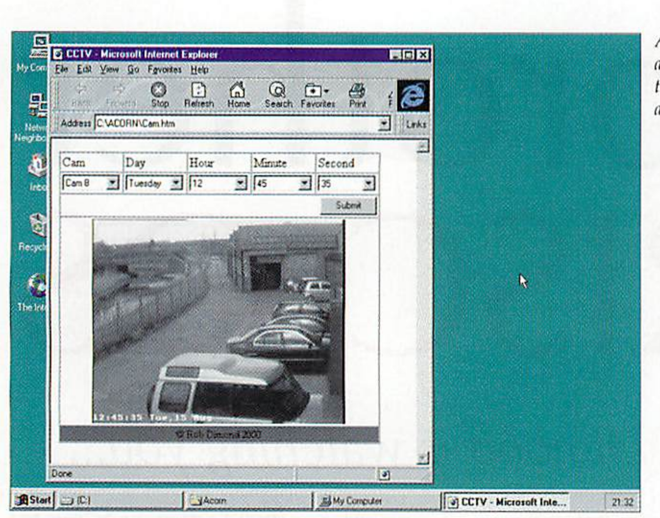
Up to a week's worth of images can be stored, with old images being expired and overwritten, so at any one time there will be a whole week to view. All images captured are time stamped with the real time clock before compression.

The player application is a simple JPEG viewer which uses the built-in OS routines. You can dial in a time to view a single image, or play the images in sequence from any point. The images can also be saved out as JPEG's for analysis or processing.

The dial-up server is a fairly



Getting the components together on the eurocard wasn't insurmountable

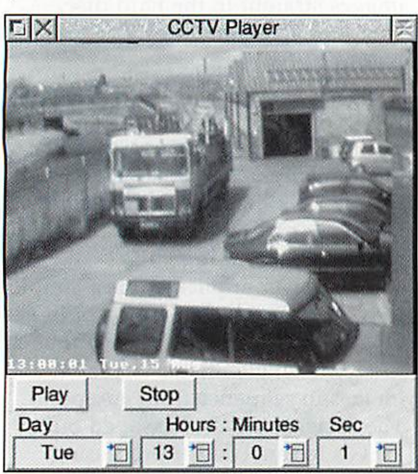

Any normal browser can be used to access the cameras from any point in the world – as long as you have the address and the password

simple Basic application which sets the modem to auto answer and then starts PPP after receiving an incoming connection. Dial-up is passworded to make the system as secure as necessary.

The prototype hardware was built onto a eurocard and plugged into an old A3000 for testing and finally the Risc PC. The first tests were run for a few hours at a time connected to an existing security camera and a camcorder.

It was in testing that the system revealed its effectivemness: during a lunch break someone closed the door of the test room. The door was in shot, so it was possible to speedily bracket the time in which the door must have been closed and find out who did it.

With a traditional video tape system of course, you would need to watch the tape all the way through to catch an event unless you know an exact time, and even then you have a lot of rewinding to do.



Compare this direct access display with the Web page access above

Hit the go button

After demonstrating this prototype we had the go-ahead to buy a Risc PC and the CCTV cameras. The Risc PC bought for the prototype was a secondhand ARM 710 machine with 1Mb of VRAM (to enable the images to be shown in a decent colour depth and resolution). It was upgraded to RISC OS 4 in order to use a 20Gb hard disc as the image store. The hard disc was mounted in a swap bay with a small fan to keep it nicely cool during it's 24-hour a day operation. A 56k modem completed the setup which has a dedicated line from the site switchboard.

The software was installed onto the new system (now in beta stage) and a series of soak tests were run. The main discovery to come out of the soak tests was that the system clock was running slow. A quick run of the useful little program from the c.s.a FAQ restored the software clock to normal operation. I was very thankful for this; it was horrifying to see an image stamped 1:00am with the sun shining brightly and a full car park.

Testing the dial-up interface was more difficult. It was possible to dial in through the switchboard from a Wintel machine in an adjacent office, but this still involved a lot of rushing about. The images are viewed using a normal Web browser which fetches a page from the Risc PC that is dynamically created from a CGI script.

The resulting page is designed to be very similar to the local player interface and the operation is the same, although a little slower of course. The benefit of this system is that any Internet-capable machine (including a RISC OS one of course) can dial in and view images without any special software. Live images can be viewed simply by dialling in the current time.

Getting all commercial

As to the commercial future of the system, it might be very promising. It may be perfectly suited to the medium sized business niche, for example the prototype system was built on a budget of under £2500 and current commercial systems cost more than double this. Our main problem with putting this prototype into production is the digitiser card.

The Eagle M2 card is no longer available. A RiscTV-based system would, I suppose, be possible but a RiscTV card would be overkill when only a simple monochrome digitiser is needed. The ideal solution would be to build an integrated monochrome digitiser and multiplexer card and we are looking at this possibility. We could be very interested in the possibility of licensing an old digitiser design in order to save wasted effort here.

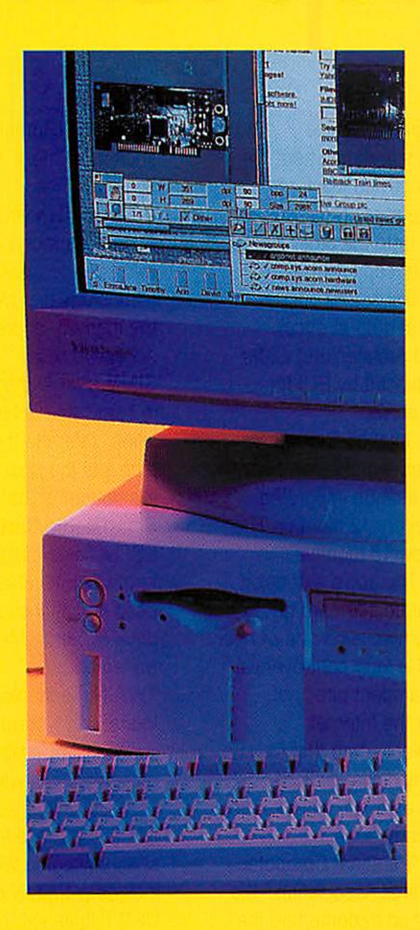
With regard to the software, there is plenty of room for development here. Some kind of selective capture based on motion detection might not be out of the capabilities of a StrongARM-based system.

Whether the RISC OS-based CCTV system becomes a commercial reality or not, the prototype should hopefully be in active service for many years to come, a testament to the fact that you really can do anything with a Risc PC. **END**

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Jargon explained

Occasionally someone will contact the magazine saying that they have trouble with some of the articles because they don't understand the words or abbreviations and can't we help?

We can, so here's the first of an ongoing jargon page that will help you understand if there's something you don't get. If you have any specific abbreviation you want explaining that isn't given here, just let us know and we'll include it.

AGP (Accelerated Graphics Port) A dedicated PC graphics bus to render 3D graphics more efficiently. AGP can transfer data at a rate up to 528MB/sec.

CompactFlash Card Compact Flash cards are smaller, more durable and can hold more data than other types of flash memory cards. They have an onboard controller so that cameras, PDAs and other devices that use the cards are not burdened with the controller software. CompactFlash cards come in sizes from 2MB to 64MB.

DRDRAM (Direct RAMbus Dynamic Random Access Memory) DRDRAM draws less power (almost a third less than SDRAM), has clock speeds of up to a dizzying 800MHz, allows for multiple channels of memory for up to four parallel banks of RAM, and a data path that's twice as wide as SDRAM (two bytes instead of one).

DVD (Digital Video (or Versatile) Disc) An improved CD-ROM-like technology that can fit between 4.7GB to 17GB of multimedia data on a single disc.

EIDE (Enhanced Integrated Device Electronics) Disc drive standard where the controller is part of the device itself, removing the need for a separate card.

EIDE adds features onto the older IDE standard, such as larger capacity (up to 8.4GB), faster access times, and burst transfer (large chunks of data at once).

ISA (Industry Standard Architecture) Older bus standard being replaced by PCI for connecting expansion cards.

Moore's Law In 1965, Intel co-founder Gordon Moore observed that the number of transistors per square inch on integrated circuits was doubling every 12 months. The pace for the "law" is now 18 months.

MP3 (MPEG Layer-3) The audio extension for the MPEG digital video standard giving surprisingly efficient compression rate of near CD quality audio. MP3 is very controversial because it has led to rampant piracy of commercial audio over the Internet.

PCMCIA card A removable card that fits into a PCMCIA slot on many digital devices containing such things as additional memory, modems and network interfaces.

PCMCIA stands for "Personal Computer Memory Card International Association," the group who developed and trademarked the technology.

PCI (Peripheral Component Interface or Interconnect) A 64-bit local bus for connecting system components and expansion cards. The maximum transfer rate on a PCI bus is 132Mb/sec.

SCSI (Small Computer System Interface) A high-speed interface standard used to connect a computer to a external devices such as printers, hard drives, scanners and so on.

SDRAM (Synchronous Dynamic Random Access Memory) An improvement on DRAM that operates faster due to a "bursting" technology that tries to predict the location of the memory address most likely to be accessed next.

SIMM (Single Inline Memory Module) A plug-in board that holds memory chips. "Single inline" refers to the pins on the module that plug into the socket forming a single row on the bottom of the circuit board.

SmartMedia Card (also known as an SSFDC or "Solid State Floppy Disc Card") A form of removable Flash RAM Memory card used in digital cameras and other handheld devices. SmartMedia is a registered trademark.

TWAIN (Technology (or Toolkit) Without An Interesting Name) An interface standard for scanner, fax, graphics and optical character recognition software.

It allows images to be scanned directly into the image editing software. All good scanners come with software packages that include a TWAIN driver.

USB (Universal Serial Bus) The latest generation of serial bus technology that can transfer data at up to 12 Mbits/second, can be daisy chained (with up to 127 devices on a single port) and can provide power from the computer's power supply to peripherals.

USB allows hot-plugging so that you can plug and unplug peripheral devices without having to shut down your computer.

Advertisers' Index

They call me

...but not to my face. Sendu Bala continues his look into UIs

Last month we discovered that the best UI (user interface) was no UI at all — the less you have to do before you get what you want, the better. In a perfect world you'd just think to yourself 'I wonder how my Internet shares are doing' and suddenly in front of you would pop the message 'Up 2000%'. In this world, however, we ask the same question and then have to go click-click-clicking, loading Web browsers, navigating links, before we're told they're worthless.

While there's little that can be done about your shares, the clicking, mouse movement and other interface necessities are just begging to be improved, either by reducing the time it takes to do them, or preferably by lowering the number of actions that need to be carried out. We'll solve the latter problem another day. Instead I'll answer the question I left hanging over from episode one: 'How on earth do you speed up mouse movement?'

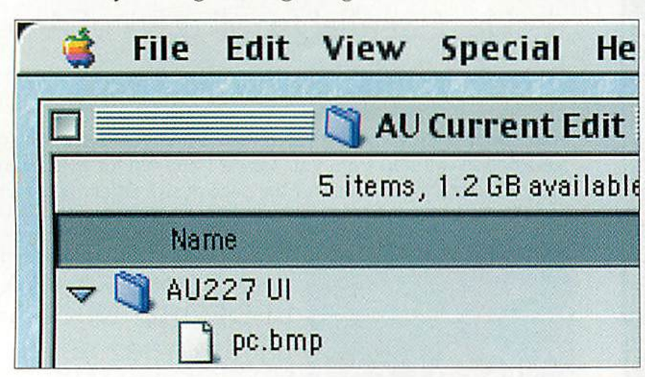
If you've ever been on a firing range, or maybe just played darts, you'll appreciate that the closer the target, the easier it is to hit. You'll also know it's easier to hit a large target, say the whole dart board, than it is to hit a small one, the bulls-eye for example. What perhaps isn't so obvious is the time involved in hitting these targets.

When you've got a large target right next to you, there isn't even any need to aim — just throw and you're bound to hit it. But try and hit a bulls-eye from across the room and you'll probably spend a good few seconds aiming up your shot, and if you fail you'll spend even longer the next time. Let's also consider which is more important, size or distance, switching games to (blindfolded) pin the tale on the donkey to reveal the answer.

If you've got a small target close to you, you could easily miss, or slow yourself down making sure you don't make a fool of yourself. If, on the other hand, you've a large target far away, you can just run full pelt toward it with your pin held out in front of you and win the game with ease; you might crash into the wall, but that donkey knows who's boss.

And so it goes with computer interfaces. Someone, let's suppose his name was Fitts, applied these simple ideas to interface design and came up with what he called Fitts' Law. It states 'The time to acquire a target is a function of the distance to and size of the target.' How do you apply this to Graphical User Interfaces (GUIs)? The target could be a button you want to click on.

Distance refers to how far the button is from the mouse pointer at a given time. Size, however, isn't so cut and dried. Sure, you can regard it as simply the size of the button, but the implication of large size is that you're less likely to miss it and it's this chance to miss that is important. A good interface, then, is one with hard-to-miss targets. Ask yourself what the hardest thing to miss on your computer screen is. I'll give you a couple of paragraphs to think about it; there's a prize* if you get it right.



Round one

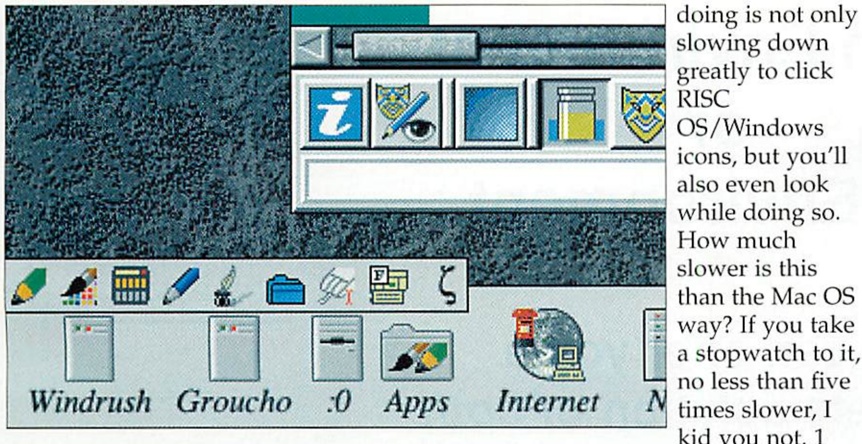
Hopefully you'll remember UltraGUI from last month, that would-be mighty GUI god we must make from the best bits of other GUIs. Well now that we've got Fitts' Law to test against, we can enter round one of the UltraGUI tournament: 'pin the tale on the donkey' and see which GUIs we ought to steal from.

Let's start with that most popular of Operating Systems, Windows, from everyone's favouritest company Microsoft. For the test we'll try and launch an application with the mouse pointer starting in the centre of the screen. We need to first click on the 'start' button but not only is it as far away as possible in the bottom left of the screen, it's also rather small.

It's not a very good opening gambit from the incumbent OS as we carefully guide our mouse pointer a long distance to a small target. If you're a little more used to the process, you might flick the pointer down to the bottom left corner, then move it up and right a few pixels so you can click 'start'. Pretty much the same goes for RISC OS, where you'll be wanting to click on the HardDisc or Apps icon. It's a nil-nil draw so far, as neither OS gets Fitts' attention.

But now Mac OS enters the field with a cunning trick up it's sleeve. At the top left of the screen is a place to click on for a drop-down menu. It's just as far away as the targets in

UltraDonkey



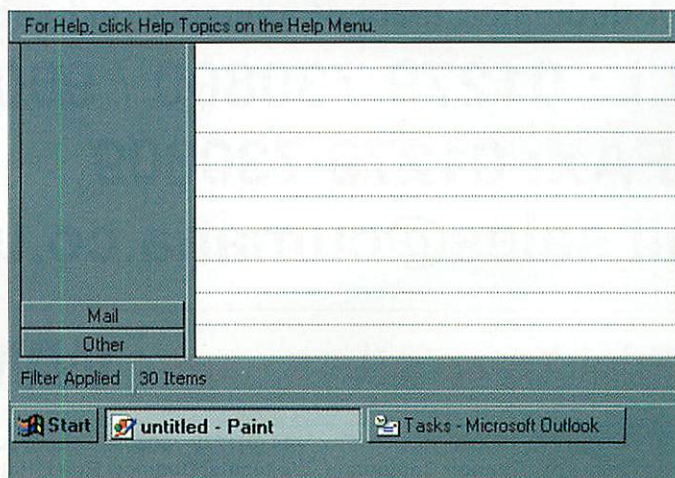
Windows and RISC OS, while it seems visibly even smaller. But remember how we could just run toward the large donkey at high speed and be confident of pinning him? The target in Mac OS may not be physically large but because you can click on the very edge pixels in the top left corner, it makes the target infinitely large (the chance to miss is 0) in two dimensions.

Why? Because you can't miss it by going too high and you can't miss it by going too far left — in both cases it's like crashing into the wall and getting the donkey anyway; since the pointer can't get past the edge of the screen it will stop in the very corner pixel. Since that pixel is part of the button, you've done it — all you need do now is click. Remember that for Windows and RISC OS we could flick the pointer at high speed down to the bottom left pixel, but clicking does nothing because this pixel isn't part of the target. Instead there's a small target very close by.

Recall also that we're effectively blindfolded — because we might be doing something else in the main area of the screen it's far preferable not to have to look down to deal with interface issues. So just because the target's close by, its finite size makes it a hassle to hit. If you think about it, what you find yourself doing is not only slowing down greatly to click RISC OS/Windows icons, but you'll also even look while doing so. How much slower is this than the Mac OS way? If you take a stopwatch to it, no less than five times slower, I kid you not. 1 point to Mac OS then.

So we've seen how to make a target unmissable in two dimensions (doing this in one dimension trivially involves having targets along the edges of the screen instead of the corners), but what about the target you just can't miss? Is an infinitely large target possible? Hopefully by now you've guessed it — the pixel underneath the pointer fit(t?)s the bill perfectly. Which OS makes best use of this target? I think the honour goes to RISC OS with its long standing use of pop-up menus; up it goes with a shiny '1' on the scoreboard.

"What about Windows?!" I hear you all cry in anguish. Doesn't it get a point? As a matter of fact it does. When you put aside targets that are in some respect infinitely large, you're left with striving for visually large targets, better yet ones that are far apart. By having some space between targets, while not reducing the chance of missing a target, you at least reduce the consequences of missing — you'll click some blank space as opposed to the wrong target which might have disagreeable results. Though it's by no means present in all Windows applications, many have an option to make the icons used in toolbars larger and/or have text labels under them. The text labels not only increase the target size even further but generally space out the icons as well.

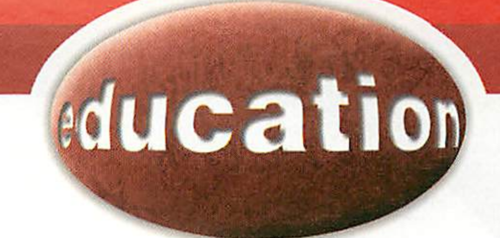


With round one drawing to a close and all the players still in the running, what have we learned? First, it's good to use the edges of the screen, especially the corners. Second, miss out on the benefits of at-the-pointer features at your peril. Finally, size does matter; those power users with a million tiny icons on screen are doing themselves no favours.

Knowing what we know now, we're about ready to give birth to UltraGUI. But hold on to your waters and keep those contractions under control, because you'll have to wait till next month to find out how he shapes up.

END

**There is no prize.*



BETT on ICT

Pam Turnbull reports on what you can expect to see

This year the show has expanded into the ground floor of the National Hall where visitors will find suppliers catering for Further and Higher Education, Distance Learning, Special Needs and the Skills Agenda. Teachers will still find the seminars very much in evidence.

New hal, new features

Indeed Life Skills is the new push for BETT this year with its own section: Future Skills. Here you'll find exhibitors dedicated to introducing students to vocational learning skills they will need to make a career in industry.

In particular you'll find featured the large range of skills needed for automotive engineering. The aim is to motivate engineering skills in students and to inspire teachers' understanding of why students cannot be held back from embracing ICT skills.

To this end, Design and Technology students will be given the opportunity to take part in a national Design and Race a motor car competition located in the heart of the Future Skills area.

In partnership with Denford, the competition will see students racing their customised Grand Prix entries in the National Hall.

National agencies

The National Hall is also where you'll find all the national agencies and government departments — DfEE, BECTa, TTA and the QCA, as well as Learning Futures another new area and one which is dedicated to high-end technological development from robotics to cybernetics, immersive and virtual technologies with a dedicated service for vocational course leaders as well as college and university needs. The Special Needs village has always been rather special at BETT and is larger again this year with the added bonus of wider aisles for better wheelchair access.

Star seminars

Seminars are being sponsored by several organisations. SEMERC, for instance, is running seminars on Special Needs issues. While BECTa, is offering help for teachers looking for resources on the Web, seminars on remote administration of ICT, the first phase of ICT Learning Centres, as well as a keynote speech from Lord Puttnam on the Thursday entitled:

'Teachers make a difference. What about ICT?' They are following this on Friday with Ultralab's Stephen Heppel discussing: 'The Diverse and Creative Curriculum: ICT's role in lighting the learning fuse.'

Awarding times

There will be a total of 15 awards to be presented this year including three new categories: the Interactive Multimedia Award, Software Tools Award and Networked Managed Service Provider of the Year Award. This latter prize being open to all NGfL managed service providers. Anyone involved in education – supplier or school – can nominate their favourite ICT-based resource, product or service with judges looking for innovation, originality as well as practical classroom application.

Having whittled down the entries the judges throw the voting open to teachers. To cast your vote log onto **www.education-net.co.uk** — a nice touch is that there will also be a Judges Discretionary Award which will recognise the special contribution made by small UK educational software development companies. Commenting on the process, Ray Barker Chair of the judging panel said, "For the third year, we are proud to say that the majority of BETT Awards will be decided by teaching professional – those who ensure that the C is the focus of ICT."

Free time

Time Education are to re-launch their successful Free Software for Schools promotion at BETT. Over 70 per cent of UK schools took part in this promotion last year with 26,350 schools taking part to claim more than £48,000,000 worth of education software packages. For more information visit Stand C60 or www.timeeducation.com

Stretching the budget

AverMedia Technologies (www.averm.co.uk) have a novel solution for old VGA monitors gathering dust in storage cupboards. They have developed a range of devices which will transform your old computer monitor into a TV, connect computers to TVs and other presentation equipment, record TV programmes onto hard disks, video conference and video e-mail with other schools are well as creating and presenting exciting course material.

Exhibiting on stand G60 their products are fitted internally or externally but AverMedia's contraptions will also allow computer graphics be sent to TVs, plasma screens, video LCD projectors and VHS recorders. So you could record how to work a particular piece of software or access to a series of Web sites onto VHS tape prior to a lesson.

Integrated access

Softease can be found on stand C56

and as well as a chance to see *Textease Studio* in all its glory integrating *Textease 2000, Textease Primary, Textease Spreadsheet* and *Textease Database*, you can play with the new Modern Foreign Language Packs, as well as the the National Curriculum Packs.

The Curriculum packs have been designed to be used with the new version on *Textease* and are colour and fun National Curriculum exercises covering English, Maths, Geography, History, ICT, Music, Science, Citizenship, Personal Social Health Education, Modern Foreign Languages and Physical Education for Key Stages 1 to 4.

A nice touch is that these have been colour-coded to match the official National Curriculum and each activity has been produced in conjunction with the QCA document for 'ICT in other subjects'. Supplied free of charge with all *Textease* products. If you have already bought your software you can download these 80 activities for free from – www.textease.com

Moving onto the Modern Foreign Language Packs, these are designed for *Textease 2000* and *Studio*, and help pupils create documents and spell check their work with the text spoken back to them in their chosen language.

The spellchecker gives suggestions where needed and also places the correct accent on characters are they are typed while menus and dialogue boxes are automatically changed to match the language you are working in. So far French and German are available.

Worldwide friends

WWF is well known for its panda logo and concern for the environment. At this year's BETT they will be asking visitors to focus on their one-stop Web site for teachers looking for lifelong learning resources for a sustainable future.

Launched in October by Jon Snow, he remarked: "We are currently bumping against the limits of what the planet can provide and absorb. Education for sustainable development is our big opportunity to ensure that future generations live, work and enjoy life sustainably."

The site – **www.wwflearning.co.uk** — provides views, weekly-updated news, expert opinion and online debates on controversial issues with leading experts such as a primary debate on a virtual oil spill. Then there is relevant and topical information and resources for teachers and educators to understand and tackle the challenge of Education for Sustainable Development (ESD) with projects on the true cost of car ownership and school energy saving projects.

Designed for use in school and at home it includes interactive internet tools such as virtual exhibitions of pupils work, online teacher's courses and audience feedback forums with downloadable activities and case studies.

Safe surf

Child-friendly but safe Web surfing are important issues for every school and SIR have come up with a possible solution. *Web Loco* provides a safe route to sites that are fun to use, differentiated into interest and subject zones and have been researched and identified as supporting the National Curriculum.

Then there is *Kids Online* which has especially designed for 7 to 11-year olds with Internet access providing units of works that will suit a range of learning needs from extension and project work to reinforcement of basic skills and remedial support. Find out more by visiting their stand or Web site: **www.sirplc.co.uk**

Internet access

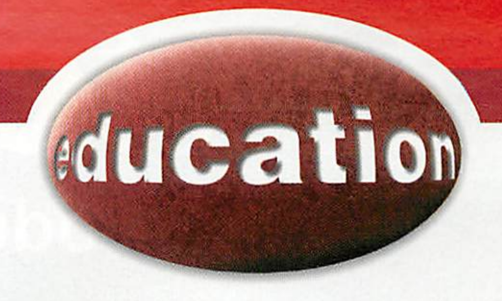
Fun and learning come together with Espresso for Schools (**www.espresso.co.uk**) and another six new modules – one for each year. These author modules are designed to support the National Literacy Strategy by giving children the chance to come face to face (via video clips) with authors of books they access at school as well as activities, Web sites and 'find out more' resources.

As part of each module, a storytime section shows authors reading from their books with Shirley Hughes, for instance, reading 'Lucy and Tom at the Seaside' for Reception, with Catherine and Laurence Anholt, Allan Ahlberg, Jeremy Strong and Dick King-Smith joining in the fun. They then go on to talk about being an author, how they get their ideas, the process of writing books, working with illustrators and so on.

Power resources

In addition the first resource banks for Espresso for Secondary Schools will also be available at Stand M87. This latter is a new service offering curriculum specific lesson resources for secondary schools with video footage, activities and tests to reinforce learning and teacher support.

Curriculum-specific lesson resources are built around current, topical TV programmes, Internet, and news reports – re-voiced to focus on curriculum objectives – and supported by interactive activities. There's also a homework facility where students can access



computers at home, in libraries and study centres with animated teachers taking them through the different topics.

The other elements of Espresso continue with weekly-updated news items, TV packages on diverse subjects and TV programmes showing use of maths in everyday life or using a newspaper as a basis for English topics.

While a Staffroom offers support and lesson plans. Espresso uses satellite technology to deliver weekly feeds of information to schools, The dish and Espresso box will cost £1,500 in addition to an average yearly fee of £4.50 per pupil

Learning online

Ed on the Web is an Internet study course for 7 to 11 year olds covering the core curriculum subjects of Literacy, Science, and Numeracy while developing key ICT skills.

With activities which can be used at home or school, as consolidation tool or revision aid Ed's English gives children access to Ed's Language Lab, Imaginarium and Poetry Workshop where reading strategies, fluent writing and originality are supports.

When it comes to Maths there is help to develop key concepts and stimulate interest in key numeracy skills, money problems, time, geometry, fractions and decimals. For science Ed aims to introduce children to the wonder of the subject while they explore living organisms, material world and physical sciences while encouraging pupils to develop their thinking and reasoning skills.

If you want to find more pop along to stand SW105 or **www.edontheweb.com**

Pro development

A new online professional development tool comes from the doors of Hay McBer. Called Transforming Learning, it is designed to drive improvements in pupil achievement.

It works by gathering and processing confidential and targeted feedback from pupils about their experiences in class and so helps teachers identify areas where they can improve the learning environment.

In addition, it provides teachers with access to nationally recognised information about the practice of effective teaching while enabling teachers to benchmark their practice with a clear path for each teacher built on action plans, monitoring and tracking achievements.

Available on an annual licence basis starting at £500 for a school with 150 pupils. Teachers can access the program at any time, with technical and professional support lines available 24 hours a day.

Passwords and the absence of paperwork ensures that all feedback is confidential. See for yourself at **www.transforminglearning.co.uk**

Three faces of education

Just launched is **MyChildAtSchool.com**, this is an interactive Web portal for parents which is to be rolled out to schools at BETT by Bromcom Computers and will provide useful access for pupils, parents and teachers. Essentially this is a gateway via the Internet allowing parents to access information relating to their child's progress via the school's administrative system.

When parents want to access information about their child's attendance, marks and behaviors they type in their unique password and personal identification number (PIN) issued by their school and they can find out this information whenever they want.

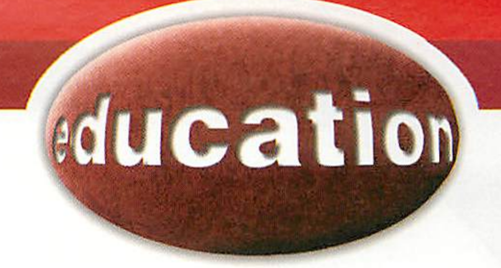
Still under development is a homework link and e-mail messaging between parents and teachers as well as the facility to pay online for school dinners or trips.

The system is being trialed at Holloway School in Islington and Associate Head Teacher, Dave Dennis comments: "In the first three months of our pilot programme, we have already seen an increase in parent/teacher communications and have received positive feedback from parents and teachers." You can find out more at **www.mychildatschool.com**

END

BETT 2001 – the facts

Where:	Olympia's Grand and National Halls
When:	10th to 13th January 2001
Opening times:	
Wednesday to Friday	10:00am until 6:00pm
Saturday	10:00am until 4:30pm
Web:	www.bettshow.com
Ticket Hotline:	0870 7577458
Seminar Hotline:	09003 423440



Benny and the Jets

Brian Gillander tells you what TopCat has done for him

It just sits there. Its little LED blinks at me, the teacher responsible for the administration of the school network, and there is the incessant, pervasive hum of powerful cooling fans that drowns out any normal conversations in the immediate vicinity.

What is this new machine that has just been installed? The Netherhall School has been a loyal Acorn champion for two decades, so I look at the new machine as an intruder, a new top-cat on the block, a non-RISC OS computer. Like a cuckoo in the nest, it is bigger than all the Acorn's around it put together and demands all the attention. But what a cuckoo!

Enough of metaphors: it is a computer which has twin 850 Pentium III processors, 4Gb of high speed RAM and a massive 36Gb of SCSI hard disc space. It runs Windows NT; has a name, Benny; and has a pivotal role to play in the ICT provision in the school.

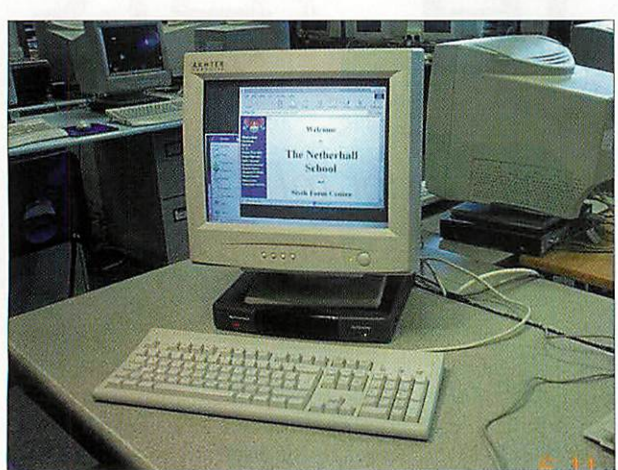
The school's approach to ICT provision has always been along the lines that the operating system and applications in use should be as transparent to the users, the students, as possible. ICT is a tool, not an end in itself. It should be available for all departments to enhance their teaching, not overpower it. Acorn's BBC range of micro-computers, and, later, RISC OS systems achieved this admirably with their stability, reliability, ease of maintenance, simplicity of use, vast range of powerful applications at sensible prices for site licences and so on.



Networking Acorn machines has always, with apologies to the excellent Level 4, AUN, and ShareFS incarnations, been hamstrung by the lack of high performance server software that could easily cope with some 200 or more computers and/or concurrent users. A rethink was needed: how to retain the accumulated skills and software of over 20 years of development but, at the same time, provide more: such as controlled access to the internet and multi-platform compatibility.

In a school, this has to be provided within the constraints of tight budgets and restricted teacher and support staff time. Budgets do not stretch to many new computers and software. Teachers are employed to teach, not manage networks, so a system must be as low-maintenance, error tolerant and as easy to administer as possible by teachers with limited support and resources. Technical support staff of the calibre needed to install and maintain high performance networks demand salaries far beyond those that schools can offer.

After successfully experimenting for two years with a old Fujitsu 486 running Debian Linux as a server which was accessed via the useful LanMan network modules by the RISC OS computers, the school needed something better and faster. A radical new approach was needed: an efficient and fast server, with software, that could retain Acorn compatibility and so avoid the expensive replacement of some 100 or so Acorns, make better use of the 100 Netstations available, and provide the additional Microsoft applications that were in demand. We knew some years ago what we



wanted: Citrix ICA® Metaframe, Microlynx Topcat and Microsoft Windows NT And now, at last, with the money available, it was installed.

Hence Benny. Benny is a high performance Hewlett Packard Server running Windows NT 4 Terminal Server. It provides a fast, stable, easily managed and totally controllable environment from which to run a large number of RISC OS-based computers and is easily accessible by computers using other operating systems. It does this by running two sophisticated networking services via NT4 Terminal Server. One is the highly respected Metaframe software by Citrix and the other is the excellent Topcat Software by Microlynx. It is the latter that furnished the server with its name.

Citrix Metaframe is application server software for Microsoft Windows NT 4.0 Server, Windows 2000 and Terminal Server Edition multi-user software. It allows applications to be served up to thin and fat clients with 100% execution on the server. Thin clients are computers such as a Netstation (such as an Acorn Sprinter) that boots from a networked server whereas a fat client is a fully-fledged desktop computer such as an Apple Mac, a PC or an Risc PC.

This is achieved by the use of ICA®, an acronym for Citrix's Independent Computing Architecture which "separates an application's logic from its user interface", to quote Citrix's press release. This means that only the server is running the application and the client — the terminal where the user is sitting — merely displays the results of this application's execution, full screen on our thin-clients and usually, but not always, in a window on the fat ones.

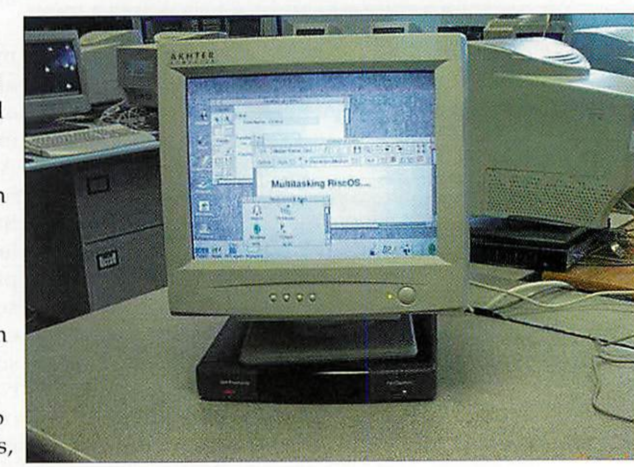
To all intents and purposes, as far as the user sees it, the client becomes a Windows NT computer. However, all the client has to do is transmit the keystrokes of the user to the server and receive and display the results when they come back. Network load is minimal, speed is subjectively fast and does not depend on the client's specifications but on the server specification and load.

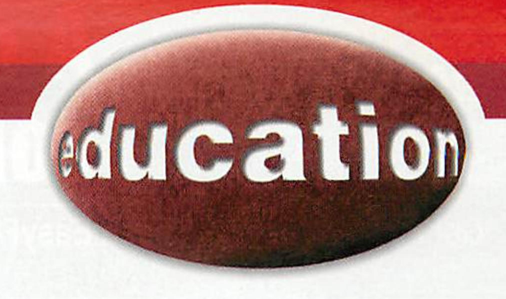
Computing has come full circle from the terminals of the 1950s and 60s, through the desktop revolution of the 70s, 80s and 90s, back to terminals in the new century. The difference is that the servers, Citrix Metaframe and ICA, and Topcat are fast, reliable and affordable. Further, this Citrix system all works happily on low bandwidth networks as well as high speed, wide bandwidth systems.

Currently, the school has a very large campus-wide network, spanning a main road, based on 10 Mbit/s ethernet with a mixture of 10Base2 co-ax, UTP and fibre connections. There are some 100 or more Netstations, around 50 PCs, 25 Apple Macintosh computers and 10 Risc PCs. This is in addition to the 60 or so discless Acorn A3020 and A3000 computers still in use.

Although the server is connected by 100Mbit/s UTP into the network there are no plans to further upgrade the rest of the network to 100Mbit/s as there is no more money at the moment. There is no subjective difference in performance that can be attributed to the physical network location of a client. Indeed, using network analysis software, it has been noted that the network load has dropped.

So what is it like in practice? In use, a student or staff member



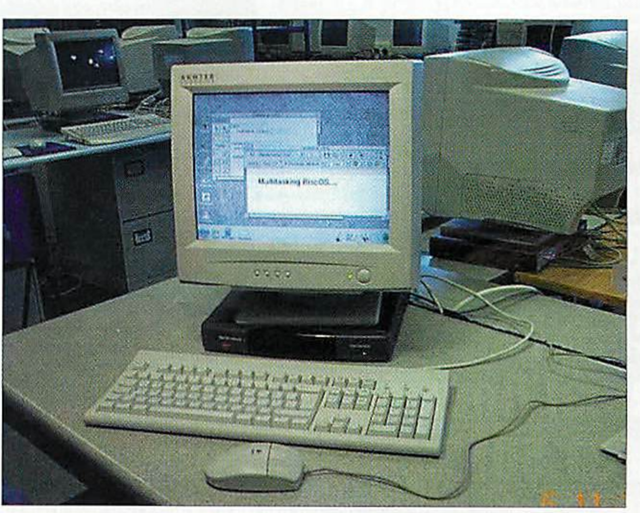


Brian Gillander is teacher of Information and Communication Technology at The Netherhall School, Cambridge and Network Manager responsible for the whole school network.

wishing to use a computer has a wide choice of client. Their choice is usually determined by which class they are attending and not by a conscious decision to use a PC or whatever. Sitting at a Netstation (this might be an Acorn Sprinter or, as in our case, a Netproduct's Netstation or NC, supplied by Cannon Computers), Acorn A3000 or A3020, the user sees a normal RISC OS desktop. This has been provided by booting the computer via Microlynx's Topcat software. On startup, the client A3020, A3000, or NC connects to Benny, the HP server, using ROM-based Topcat software on the Net card and boots into RISC OS. This has breathed a new lease of life into older Acorns.

The advantage is that the latest RISC OS version and modules are soft-loaded and available to older machines as well the latest NCs. Thus, large numbers of discless Acorns now have a fast, reliable boot server based on industry-tested NT software and we no longer suffer from the timeouts and lost connections that plagued our Acorn Server technology — in fairness, Acorn's network technology was never intended for large numbers of clients, but we are a very big school and we do have large numbers.

Access to the RISC OS applications via Topcat by multiple users is very fast and reliable, and very easy to customise by the administrator, myself. All the legacy software from two decades works happily, even BBC B programs can be used via Warm Silence's *6502Em* that turns an Acorn Sprinter or NC into a *BBC* Model B! There is something rather unnerving about this — but there is so much BBC B software that still has a place in teaching. Further, Microlynx provides an ICA client that allows these machines to run Windows NT sessions and allows access to all the Windows software that works under NT — any application that runs under Windows NT should work via an ICA client but it is worth checking carefully. All this: Windows NT and RISC OS applications such as the renowned *DataPower*, *Impression* and so on, on an Acorn. When it is demonstrated, people cannot not believe what they see. Acorn Risc PCs, desktop Windows PCs and Apple computers use a client application, from either Microlynx or Citrix, to access the Windows NT sessions and see no difference between this and a "nomal" windows PC environment. Students and staff can use whatever environment suits their needs.



As the administrator, I have found Windows NT to be a challenge but not an insurmountable one! It can be very helpful and intuitive in some ways but totally unhelpful in others. For example, when adding new users there is no simple way to add 250 at a time (the school has around 250 pupils per year group so this is a yearly job) so DOS scripts and Acorn applications, written by Cannon Computing, are used.

More irritatingly, there seems no way to export a list of users so that I can keep a separate record — the Domain User Manager lacks these fundamental facilities that made Level 4 so easy to use by us amateur administrators. Maybe, I just need to learn more about it but the essence of good software is that it can be used without resource to knowledge-bases or expensive third-party textbooks. I never bought a £60 text book to tell me how to use Acorn Level 4 server software.

I am now experiencing the vagaries of PC help lines — every Acorn supplier I have ever contacted has been more than generous with help. PC software suppliers could (and should) learn a lot from their Acorn cousins. Schools are not big business but they do supply the business people of the future.

More data about the above can be found on these Web sites:

The Netherhall School
www.netherhall.cambs.sch.uk

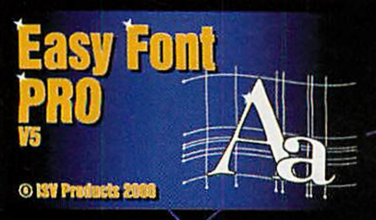
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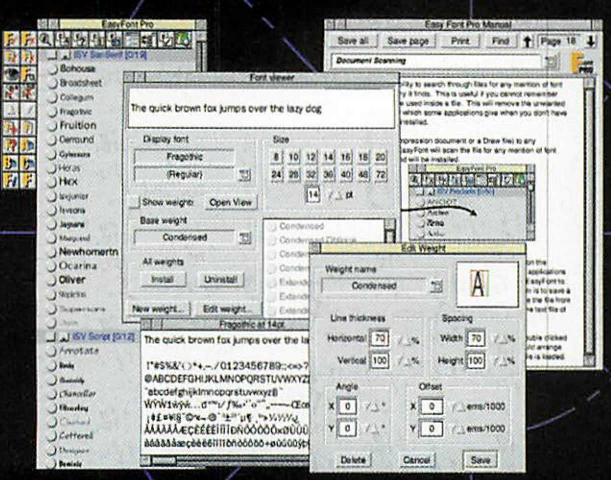
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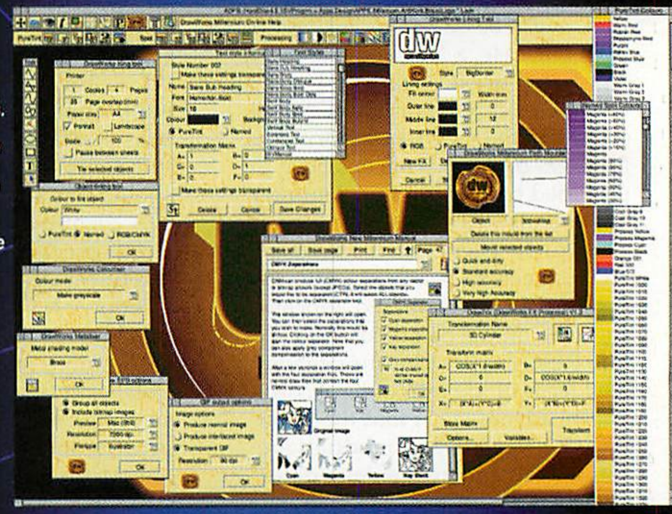
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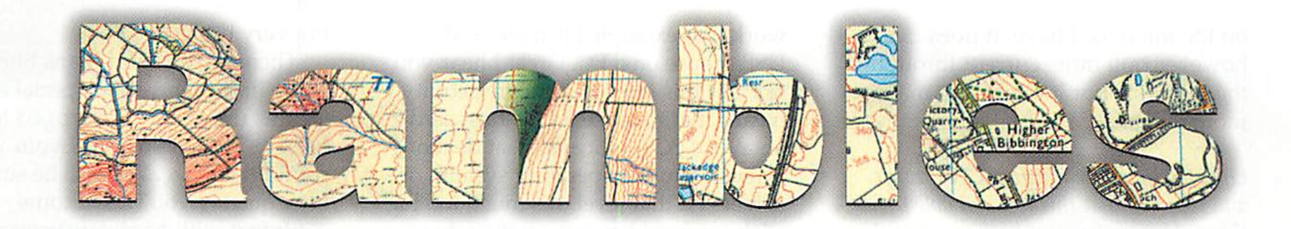
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RISC OS



Mike Cook tries some other locations

Have you ever tried to go on holiday in October? It's not easy, flick through the holiday catalogues and there aren't many in affordable or desirable locations, Alps and self catering.

Requesting help from a travel agent only resulted in the girl behind the desk flicking through the catalogue and saying there was nothing. So the Internet to the rescue.

Online I found some cheap flights to Geneva, then searched with Google and located some privately owned self-catering flats in the Alps. Each one had pictures of the flat and surrounds along with a detailed description of the facilities of the town and the property. I selected one and e-mailed the owner to see if it was free, it was.

Finally I looked at all the car hire companies and compare the prices, not so easy this one because some offered optional insurance and others had hidden surcharges but I finally got a good deal.

Then back to book the flights and despite only having checked the price two days earlier the Easy Jet price had gone up by £200, they have a policy of increasing the cost as the bookings increase so that popular flights don't sell out and unpopular ones get some passengers.

So back online for a British Airways flight — only £100 more than the original cost. All booked up without leaving my keyboard, and a package of my own making, the Internet is here to stay.

Andy Burgess is having problems with his inputs, he writes:



"I have a Risc PC 600 which doesn't seem to respond to the keyboard and mouse (except its buttons). Any ideas of solutions? I'm sick of using PCs — just trying to get to the Newsgroups is painful (and impossible for me). I want my Acorn back — if you can help!"



You need to see if the problem is in the keyboard or the computer. Fortunately the Risc PC hardware for keyboard and mouse is the same as used on the PC. So swap them out, try your PC hardware on the Risc PC. If that doesn't work then the problem is likely to be in the I/O chip on the Risc PC and that involves a trip to the service man.

Last month Steve Mardell was having a problem with the 1-wire bus interface, well he solved it in a rather unusual way:



"Success at last, at least I hope so. I took my computer into work as already stated. After lots of head scratching and two new interfaces later we were getting nowhere but the turning point came when the electrician put a second schottky diode between pins 2 and 4 at the device end of a short cable, approximately 6in.

"At first we thought that the diode may have become damaged and so removed the one at the plug end, so this was replaced. but then the problem returned, so in the end I now have two schottky diodes between pins 2 and 4 and one between pins 3 and 2. This worked with one device so we then started adding more devices to check them and to make sure there are no problems with more than one device.

"One of the devices was found to be faulty, three of them ok. So to sum up, I was concerned that we had wired up some thing wrong as suggested, but we could not see any thing obvious. All now seems ok and all the test programs and *Probe1* work correctly. I can now start working on the next part of my project, by following your articles on the one wire bus, firstly to monitor the temperature around my solar heating system and eventually to be able to control motorised valves, pumps and so on."

Thanks for that although it is a bit of a puzzle why it now works, putting two diodes in parallel like that should only affect the voltage by about 18mV by the action of halving the current through each diode. Something must be on the edge somewhere.

One thing is close and that is the -ve level on the serial input, it could be improved by changing the 3V9 zener to a 3V6 one. This increases the negative voltage from -2.4 to -2.88V



on the interface I have. It does however pull more current through the DTR line but it might just make it more reliable.

Update: Steve tried fitting a 3V6 zener and reported that this was not able to fix the problem so he went back to using the two diodes, that remains a puzzle then.

John Walsh wants to play with new toys on his Risc PC, he writes:


"I have seen adverts for all sorts of computer peripherals with a USB interface, what is this and is there any chance you could do a project to add one."


USB stands for Universal Serial Bus and is a method of communicating with several devices all on the one interface. You can, in theory, have up to 127 devices connected at once. They are hot pluggable, which means that unlike interfaces like SCSI you don't have to power down everything before you connect or disconnect them.

The hardware interface is a differential signal that signals it's zeros and ones through line transitions rather than levels used in normal protocols. It can operate at two speeds. The fastest is 12Mbits per second or 1.2Mbytes per second, although with software overhead this is more realistically 9.6 Mbits, there is also a low speed mode that operates at 1.5 Mbits per second.

Now the whole thing is wrapped up in some pretty complex software protocols involving the abstractions of frames, packets and data pipes. Also there are classes of devices with each class being further subdivided. For example there is a Human Interface class which sends its data in the form of reports and each device can have its own report or a standard one.

For example there are standard reports for a keyboard, joystick or mouse. In theory, if a computer supports one of these any manufacturer's peripheral should work. For example I can use a Mac USB mouse on a PC. Great I hear you say, but this intense software activity means that to make a USB host card on a Risc PC requires a great deal of extension to the operating system, or drivers on that level. It's much too big a job for one man, even with a dog.

There are some new machines coming out with USB ports on them but it remains to be seen to what extent the software supports all the classes of device. However, potentially it could open up the door to a whole new world of peripherals. Certainly it is on to develop a USB-based interface using a PIC chip along with a few other components.

Next. Ian Turner wants to get into interfacing but doesn't know where to start.


"I read your construction articles regularly but have never made anything. I would like to start doing some interfacing but don't know where to start as most of your projects seem too complicated for a beginner."

I do try to cater for all levels of ability in my projects but I must admit that it is the more complex ones that are of more interest to me. However, a good place to start is the first three issues of Run The RISC starting in the May 95 issue of *Acorn User*. There I showed how to connect a simple signal into the computer's printer port and developed it into the steady hands game. This involves only wires with no active electronics at all. You can get it from the Web at **www.doc.mmu.ac.uk/Acorn/RTR95.html**

Next try the March 96 realtime clock calibrator, this involves making up a radio receiver in the form of a Maplin Kit. This kit contains all the parts you need and has detailed instructions so you will gain experience and confidence in construction. June 96 shows you how to interface a PC joystick using just a few components so the construction is not very difficult.

Then try the Blind Mans Bluff game in the Christmas special issue of 96, this uses buzzers strapped to your head to allow you to feel your way round the maze. You will be surprised how quickly you will become confident with hardware especially if you put in a bit of investment and get yourself an oscilloscope, these are invaluable in electronics as this is your eyes.


Finally Simon Broadhurst wants to improve the look of his desktop.

"I have gathered a few icons from the Net and your cover discs for some filetypes that are better than the default ones. I have put them in one sprite file and placed that in !Boot.Choices.PreDesk, however some files don't change and others revert back sometime later, how do I stop this?"

What is happening is that you have applications that have *!Sprite* files in them that redefine that filetype back to its original shape.

Open up any applications in the root directory and look at the *!Sprite* files and delete any icon that refer to the file types you want to redefine, then save the files back from where you took them. Then open your folders one at a time and see if any files change their icon – you have to refresh them by wiping a window over an example files icon to see if they change.

Then look in each application in that folder for redefinition. What's needed is a snooper application that finds applications and provides a list of all sprites defined in them. But I know of nothing that will do this – any volunteer among our utility-writing readers?

Contacting AU

Mike Cook:
rambles@acornuser.com

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In this issue the Advertisers' Index can be found on page 52

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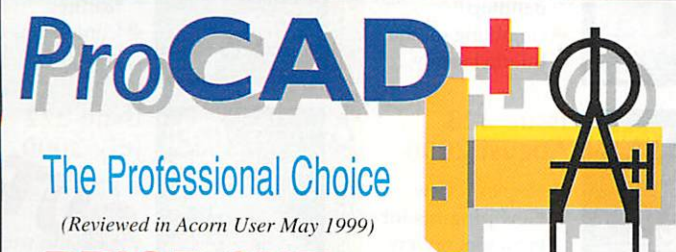
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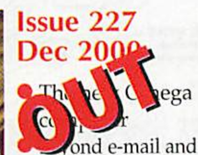
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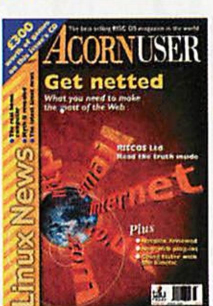
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A surprising delivery

With all due respect to my wife (and many other women who have gone through childbirth), the announcement of the Omega in *Acorn User*, may be has some similarity to going to the doctor (waiting for the *Acorn User* to come through the letter box) with tummy ache, and you're leaving with a new baby. What a peach.

Tell me (tell us all) Steve, what were your immediate thoughts when you learned of the Omega? You give the impression you were kept in the dark too — bet Mike Cook knew though.

Funny really, only the other month when visiting the Salt Mills in Shipley, I paid a little bow to the door of Pace et al, knowing they were doing their bit with RISC OS in their venture with Bush TV. Cor, if I knew what I know now, I'd have been locked up for what I may have done outside the door.

Just need a 'printer driver' to go with the machine, and I'll be buying one.

Phil Coates
by e-mail

Mike didn't know before me (at least, he didn't tell me if he did) and I didn't know three weeks before the magazine went to press — and I didn't know the details until a week before. While I know that Intel were well aware of Microdigital's plans, no other company did. This was a real secret.

Merits and demerits

I have read with interest the correspondence in the October and November issues concerning the merits/demerits of RISC OS.

I am not a computer professional, don't programme, don't run networks, not in a school. Just a normal run-of-the-mill user — writing letters and reports, doing the departmental budget, costing new products, the odd bit of DCF on new investment proposals, and all that stuff. Even playing the odd game. Just the sort of person to whom Acorn always seemed to be oblivious.

I have been using Wintel PCs (and DOS ones before that), as well as RISC OS machines (and BBC B before that). All the way through I have found the RISC OS machines easier and more reliable, not to mention cheaper, to run and maintain.

The big exception, of course, is the Internet, (see the November letter from L.P. Baker). I have spent the best part of the last six months with RISC OS getting onto the Internet (not too traumatic) and then getting newsgroups working (exceedingly traumatic). Next week I start on e-mail — I am having to use *MS Outlook* at present.

As an aside, I installed my copy of MS Internet Explorer/Outlook Express a year ago as part of the Windows 98 SE upgrade — it is getting flakey already. Must be time for the usual one to two yearly "wipe the hard disc and re-install everything again" exercise.

My firm conclusion is that the Internet problem is not RISC OS or the software, such as *Socketeer*, *Newshound* and the rest. The very big problem is the instructions for installation. These are at the right level, and seem to be intended, for the experienced network administrator, but are worse than confusing to the stand alone, and lonely, computer user. I would expect that from the programmers — as with any technical product

Useful URL

I have discovered a really useful Web site that other *Acorn User* readers might be interested in: **www.the7sisters.co.uk**

It's a Web site supporting teachers and ICT coordinators. Unlike other resource sites this has set ICT its focus, so everything there can be used with a computer. Not only are there worksheets to download, but I was really impressed by the number of *MyWorld* screens (free to download) covering a range of Primary abilities.

There are also some screens for *PinPoint* (Data Handling package) and some activities to use with wordprocessors.

Even more exciting, though, are the interactive screens for the children to do themselves. One is a game of ICT Hangman, where all the words seem to be related to computers or ICT in some way, and there is a screen about the solar system — an excellent resource for anyone doing Space at KS2 this year.

I understand they also offer online support and Web authoring. Well worth a look, I'd say.

Graham Wootten
by e-mail



the instructions must be written by, or at least with strong input from, an outsider. There is no other way.

To that end I have put together a write-up on "Getting on Line" using *Socketeer*, *DialUp*, and any browser. I am about to start on newsgroups, with *Newshound*, *Newsbase* and *Messenger* and/or *Pluto*. This is detailed stuff, including all the niggly bits which all the writers I have seen gloss over, but which cause endless frustration as a result. The actual instructions themselves come down to a remarkably short and simple list.

I am prepared to offer the resulting article(s), free and gratis in the spirit of the software itself, to anybody prepared to publish it for the common good. At present it is in a complete but draft form, needing some work on layout and generally "sharpening up". If you want to have a look and let me know.

Martin Hodgson
by e-mail

I am taking Martin up on his offer and at the very least it will appear on a CD, possibly even as an article or two for th magazine.

Computer fault?

While I agree with your sentiments regarding the blame of "computer problem" in relation to the difficulties with the Scottish Qualifications Authority, a number of points must be made clear;

• There are no "A" levels under the Scottish examination system. Our entrance qualification is the Higher which is sat by students in their fifth year of secondary school. There is an option of continuing in sixth year to the Advanced Higher which differs considerably from the A-level in that content may be similar, or perhaps less broad, but in general, depth is greater.

• The Press in Scotland have made little of any "computer problem". The issue is far more complex and I believe this is well reported North of the border. While I must be careful as an employee of a local Education Authority and as such, freedom of speech does not apply, a number of points of clarification may be helpful:

The two education boards — vocational (SCOTVEC) and academic (SEB) have recently amalgamated — an amalgamation of two very different bodies with very different organisational practices.

The new Scottish curriculum in the form of the Higher Still programme involved a massive organisational, educational, and bureaucratic change. It has to be pointed out that schools put in a lot of extra effort last session to successfully meet all targets and obligations in terms of curriculum, assessment and bureaucratic requirements.

The extent of the organisational change was not fully appreciated at a political level, neither was the extent caused by the amalgamation, anticipated by the new Qualifications Authority.

It appears that database preparation, staffing, the effect of timing changes on marker requirements and general preparation for the vast quantity of data coming from schools, was sadly lacking on behalf of the Scottish Qualifications Authority.

As such, inadequate database preparation and operation does play a part in the difficulties experienced in Scotland, However, as is becoming abundant clear in the current investigation, this is far from the whole story.

I must reiterate, that as a teacher and an employee of a local authority, there is no allowance for freedom of speech. I have endeavoured to be as accurate as possible and merely reflect coverage in the Press in Scotland.

Name withheld by request
by e-mail

Thanks for that, it may not be RISC OS-specific but it's worth understanding what's really going on — that'll teach me not to believe journalists ... perhaps I ought to know better.

Just frivolous

I read with interest the letters in November's issue of *Acorn User* regarding Steve Turnbull's remarks about RISCOS not being easy to use.

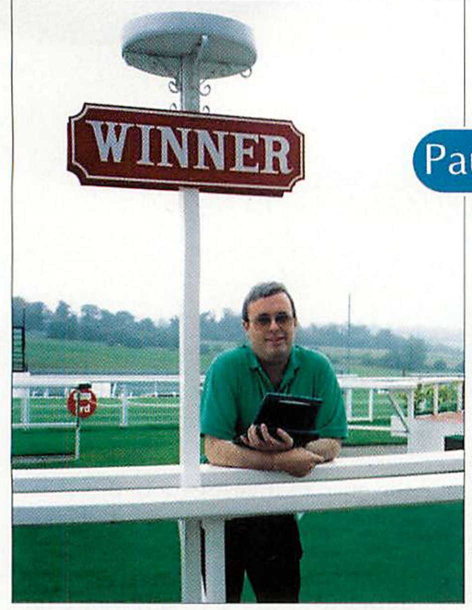
I don't want to sound high-handed but this is actually a fairly frivolous debate — compared to the real one which actually threatens the entire RISC OS world.

I am, of course, referring to Microsoft's "offer" to help the DFEE to get each school in England online. And how would they do that, you ask? With Microsoft Explorer and computers running Windows.

In the meantime bang goes the RISC OS computer system and the remnant of the British computer industry. It's about time somebody started lobbying Blunkett and his cronies to buy British. A few good schools orders would get everyone out of the "It must be Windows" mantra.

Christopher Price
Bursar — Merton Court School





Paul Middleton

Interviewing, sometimes it is like being in a Shakespearian play, in that what is perceived to be going on, ends up being a totally different scenario. I mean, who would have thought that Paul Middleton comes from a theatrical family? Paul's parents met when they were in the original *Holiday On Ice* and Paul first 'trod the boards' when he when he was seven. Paul can literally claim he knows how to run a good pantomime.

Paul Middleton is the managing Director of RISC OS Ltd which means, his own words: 'I am the one that was mad enough to set up RISC OS Ltd last year. If we go back to black Thursday, at that time my brother worked for Acorn and immediately after the announcement to the staff he phoned me saying. 'I think you had better sit down'. After realising the enormity of what had been announced the first person I phoned was Steve Turnbull and said 'Steve, I think you ought to sit down''.

> It was moral blackmail against Acorn

Paul went to the meeting in Cambridge along with lots of other dealers and developers. The steering group was set up and Paul volunteered to be the PR person. In the end Paul ended up being on the steering committee.

'By chance I went to Cerilica's first showing of *Vantage*. A lot of people turned up for that meeting who had different ideas as to what should be happening, rather than Peter Bondar trying to resuscitate Acorn. After speaking to these people it came clear that the only way forward was to buy out RISC OS not Acorn, so I drove back from Ross on Wye and put together a presentation plan overnight. I drove to Cambridge the next morning.'

The Steering Group had a meeting with Acorn, which did not go very well and it was almost on the verge of breaking up when Paul put his suggestion forward. After a ten-minute break to mull it over Acorn said yes.

'So it was left to me to having been the one who came up with the idea to put together a business plan. Through the next two months, bit by bit it began to make sense. The original figure Acorn wanted to buy out RISC OS in its entirety was not something we could afford. Acorn considered that RISC OS was worth a 100 man years of development work so they were not going to be selling cheap.

'From Pace's point of view, what they liked about the idea was that I was independent, I had no ties with anyone else in the Acorn market. Others had vested interests in their own businesses and not the whole market. The goal at first was to make the rest of RISC OS market carry on, which was 200 companies. I had made a chart of the companies affected and used it for moral blackmail against Acorn.'

Paul used to be a videotape editor for Channel 4 Wales (SC4), working on things like "Super Ted" and "Rodger Melly". He trained as a TV engineer and wanted to get into the BBC but he is deaf in one ear — no problem for video but sound and TV studios were a different matter.

'So I was videotape editing until 1990 then I got hepatitis, lost 4 stone in weight and needed to take it a bit easier. S4C decided to subtitle in English 50% of what they put out; my brother had just finished university and was into Acorns. I had been using Tandy TS80 computers for various things like labelling, databases and a system for subtitling on screen as opposed to teletext. I even wrote the software.'

SC4 wanted Paul to do teletext subtitles and he took up the challenge using an A440 and a video graphics card from Irlam Instruments. It was from this system that Paul formed Uniqueway, which eventually became a dealership. The original company still exists but most of Paul's time is taken up with RISCOS Ltd.

'We have an active list 10,000 desktop users and that just about pays for doing bits and pieces on RISC OS, but its not enough to support everything that comes out or all the new technologies. To be able to expand we have to use the desktop market as a launch pad and then use income from the other markets to build the desktop products. That's why we're looking at the NetBook, it's a product that opens up new areas for RISC OS to go into.'

Paul has a lot of other ideas up his sleeve, but for these to become a reality he is going to have to find new investment. But in a year that, thanks to Pace, has seen more RISC OS technology shipped than ever before, let's hope he has little problem.

'My hobbies are trying to keep a marriage going in the current market,' laughs Paul. 'It is one thing taking on running a company, it is quite another taking on the hopes of the whole RISC OS market and living up to the expectations of such a diverse group.'

'Et tu, Brute.'

Jill Regan





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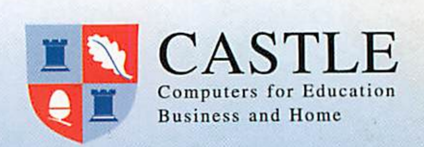
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